

jc584 U.S. PTO  
09/450969  
11/29/99

1045                      1050                      1055  
 Leu Met His Thr Val Met Gln His Leu Pro Phe Arg Glu Gln Arg Leu  
                          1060                      1065                      1070  
 Thr Lys Asp Glu  
                          1075

<210> 5849  
 <211> 44  
 <212> PRT  
 <213> S.epidermidis

<400> 5849  
 Leu Ser Glu Val Thr Tyr Asn Lys Ile Ser Leu Val Asn Phe Val Arg  
 1                      5                      10                      15  
 Lys Pro Leu Lys Ile Tyr Ser Glu Tyr Asp Tyr Cys Gly His Phe Ile  
                          20                      25                      30  
 Leu Leu Tyr Tyr Gln Val Leu Lys Met Leu Asn Tyr  
                          35                      40

<210> 5850  
 <211> 313  
 <212> PRT  
 <213> S.epidermidis

<400> 5850  
 Phe Arg Arg Val Tyr Met Thr Lys Tyr Val Leu Lys Arg Leu Cys Tyr  
 1                      5                      10                      15  
 Met Phe Val Ser Leu Phe Ile Val Ile Thr Ile Thr Phe Phe Leu Met  
                          20                      25                      30  
 Lys Leu Met Pro Gly Ser Pro Phe Asn Asp Thr Lys Leu Asn Ala Gln  
                          35                      40                      45  
 Gln Lys Glu Ile Leu Asn Glu Lys Tyr Gly Leu Asn Asp Pro Val Ala  
                          50                      55                      60  
 Leu Gln Tyr Val Asn Tyr Leu Lys Asn Val Val Thr Gly Asp Phe Gly  
 65                      70                      75                      80  
 Asn Ser Phe Gln Tyr His Asn Met Pro Val Trp Asp Leu Val Lys Pro  
                          85                      90                      95  
 Arg Leu Ile Pro Ser Met Glu Met Gly Ile Thr Ala Met Val Ile Gly  
                          100                      105                      110  
 Val Val Leu Gly Leu Val Leu Gly Val Ala Ala Ala Thr Lys Gln Asn  
                          115                      120                      125  
 Thr Trp Val Asp Tyr Thr Thr Thr Ile Ile Ser Val Ile Ala Val Ser  
                          130                      135                      140  
 Val Pro Ser Phe Val Leu Ala Val Leu Leu Gln Tyr Val Phe Ala Val  
 145                      150                      155                      160  
 Lys Leu Glu Trp Phe Pro Val Ala Gly Trp Glu Gly Phe Ser Thr Ala  
                          165                      170                      175  
 Ile Leu Pro Ser Leu Ala Leu Ser Ala Thr Val Leu Ala Thr Val Ala  
                          180                      185                      190  
 Arg Tyr Ile Arg Ala Glu Met Ile Glu Val Leu Ser Ser Asp Tyr Ile  
                          195                      200                      205  
 Leu Leu Ala Arg Ala Lys Gly Asn Ser Thr Leu Lys Val Leu Phe Gly  
                          210                      215                      220  
 His Ala Leu Arg Asn Ala Leu Ile Pro Ile Ile Thr Ile Ile Val Pro  
 225                      230                      235                      240  
 Met Leu Ala Gly Ile Leu Thr Gly Thr Leu Thr Ile Glu Asn Ile Phe



2503

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |  |  |
| Gly | Val | Pro | Gly | Leu | Gly | Asp | Gln | Phe | Val | Arg | Ser | Ile | Thr | Thr | Asn |  |  |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |  |  |
| Asp | Phe | Ser | Val | Ile | Met | Ala | Thr | Thr | Ile | Leu | Phe | Ser | Thr | Leu | Phe |  |  |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |  |
| Ile | Val | Ser | Ile | Phe | Ile | Val | Asp | Ile | Leu | Tyr | Gly | Val | Ile | Asp | Pro |  |  |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |  |  |
| Arg | Ile | Arg | Val | Gln | Gly | Gly | Lys | Lys |     |     |     |     |     |     |     |  |  |
| 305 |     |     |     |     | 310 |     |     |     |     |     |     |     |     |     |     |  |  |

<210> 5851

<211> 618

<212> PRT

<213> S.epidermidis

<400> 5851

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Arg | Asn | Leu | Leu | Leu | Ile | Gly | Lys | Asn | Val | Thr | Met | Arg | Lys | Lys | Leu |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Asn | Asn | Glu | Tyr | Arg | Ser | Ala | Lys | Lys | Ile | Arg | Tyr | Met | Pro | Gly | Leu |  |  |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Asp | Gly | Leu | Arg | Ala | Ile | Ala | Val | Ile | Gly | Ile | Ile | Ile | Tyr | His | Leu |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Asn | Lys | Gln | Trp | Leu | Thr | Gly | Gly | Phe | Leu | Gly | Val | Asp | Thr | Phe | Phe |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Val | Ile | Ser | Gly | Tyr | Leu | Ile | Thr | Ser | Leu | Leu | Leu | Lys | Glu | Tyr | Glu |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |  |
| Asp | Thr | Gly | Thr | Ile | Asn | Leu | Lys | Asn | Phe | Trp | Ile | Arg | Arg | Ile | Lys |  |  |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |  |  |
| Arg | Leu | Leu | Pro | Ala | Val | Phe | Ala | Leu | Ile | Val | Val | Val | Gly | Ile | Ala |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |  |  |
| Thr | Leu | Leu | Leu | His | Pro | Glu | His | Ile | Val | Arg | Val | Lys | His | Asp | Met |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Ile | Ala | Ala | Ile | Phe | Tyr | Val | Ser | Asn | Trp | Trp | Tyr | Ile | Ala | Lys | Asp |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Val | Asn | Tyr | Phe | Glu | Gln | Phe | Ser | Phe | Met | Pro | Leu | Lys | His | Leu | Trp |  |  |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |     |  |  |
| Ser | Leu | Ala | Ile | Glu | Glu | Gln | Phe | Tyr | Leu | Phe | Phe | Pro | Ala | Val | Leu |  |  |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |  |  |
| Leu | Leu | Phe | Met | Ala | Ile | Val | Lys | Lys | Lys | Lys | Asn | Val | Ile | Leu | Met |  |  |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |  |  |
| Phe | Trp | Ile | Ile | Ser | Leu | Val | Ser | Leu | Leu | Met | Met | Val | Val | Ile | Ser |  |  |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |  |  |
| Gln | Pro | His | Leu | Asn | His | Ser | Arg | Val | Tyr | Phe | Gly | Thr | Asp | Thr | Arg |  |  |
|     | 210 |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |     |  |  |
| Leu | Gln | Thr | Leu | Leu | Leu | Gly | Val | Leu | Leu | Ala | Phe | Ile | Trp | Pro | Pro |  |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |  |  |
| Phe | Lys | Leu | Asn | Pro | Asn | Pro | Pro | Lys | Gly | Leu | Lys | Thr | Val | Ile | Asn |  |  |
|     |     |     | 245 |     |     |     |     | 250 |     |     |     |     |     | 255 |     |  |  |
| Ser | Ala | Gly | Ile | Gly | Leu | Thr | Phe | Val | Ile | Leu | Leu | Phe | Phe | Asn |     |  |  |
|     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |     |  |  |
| Val | Ser | Asp | Glu | Ser | Asp | Trp | Ile | Tyr | Asn | Gly | Gly | Phe | Tyr | Leu | Ile |  |  |
|     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |     |  |  |
| Ser | Thr | Met | Thr | Leu | Leu | Ile | Ile | Ala | Ser | Val | Val | His | Pro | Thr | Thr |  |  |
|     | 290 |     |     |     | 295 |     |     |     |     |     | 300 |     |     |     |     |  |  |
| Ile | Leu | Ala | Lys | Leu | Leu | Gly | Asn | Pro | Leu | Phe | Val | Tyr | Ile | Gly | Lys |  |  |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |  |  |

Sequence = 5851

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Ser | Tyr | Ser | Leu | Tyr | Leu | Trp | His | Phe | Pro | Val | Ile | Ser | Phe | Ile |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| His | Ser | Tyr | Phe | Ile | Asp | Gly | Gln | Leu | Pro | Thr | Tyr | Val | Tyr | Ile | Met |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Asp | Ile | Val | Ile | Thr | Val | Leu | Leu | Ala | Glu | Leu | Ser | Phe | Arg | Tyr | Val |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Glu | Thr | Pro | Leu | Arg | Lys | Glu | Gly | Leu | Lys | Ala | Phe | Thr | Phe | Lys | Lys |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Thr | Tyr | Lys | Pro | Gln | Phe | Ile | Arg | Thr | Ile | Val | Thr | Leu | Ile | Met | Leu |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Leu | Pro | Phe | Ile | Phe | Ile | Leu | Val | Gly | Ala | Phe | Asp | Lys | Phe | Gly | Lys |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Asp | Thr | Ile | Ser | Asn | Lys | Ala | Gln | Thr | Phe | Asn | Thr | Asn | Glu | Ala | Asp |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Gln | Tyr | Leu | Ile | His | Met | Ile | Pro | Ile | Asp | Asn | Ile | Ser | Leu | Thr | Ser |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Asp | Gly | Lys | Thr | Lys | Glu | Asn | Lys | Lys | Asp | Asn | Asp | Val | Tyr | Thr | Gln |
|     | 450 |     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |
| Ile | Lys | Pro | Leu | Leu | Ile | Gly | Asp | Ser | Val | Met | Val | Asp | Ile | Gly | Glu |
| 465 |     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |
| Gln | Phe | Lys | Thr | Lys | Val | Pro | Lys | Ala | Lys | Ile | Asp | Gly | Lys | Val | Gly |
|     |     |     |     | 485 |     |     |     |     | 490 |     |     |     |     | 495 |     |
| Arg | Gln | Leu | Tyr | Gln | Ala | Glu | Ser | Leu | Val | Lys | Asn | Gln | Tyr | Arg | His |
|     |     |     | 500 |     |     |     |     | 505 |     |     |     |     | 510 |     |     |
| Tyr | Asn | Lys | Pro | Ser | Asp | Gln | Ile | Ile | Leu | Glu | Leu | Gly | Thr | Asn | Gly |
|     |     | 515 |     |     |     |     | 520 |     |     |     |     | 525 |     |     |     |
| Asp | Phe | Thr | Lys | Glu | Gln | Leu | Asp | Asn | Leu | Ile | Asp | Lys | Phe | Gly | Lys |
|     | 530 |     |     |     |     | 535 |     |     |     |     | 540 |     |     |     |     |
| Ala | Gln | Val | Tyr | Leu | Val | Asn | Thr | Arg | Val | Pro | Arg | Ser | Tyr | Glu | Ser |
| 545 |     |     |     |     | 550 |     |     |     |     | 555 |     |     |     |     | 560 |
| His | Val | Asn | Glu | Leu | Met | Ala | Lys | Ala | Ala | Lys | Asn | Lys | Lys | Asn | Val |
|     |     |     |     | 565 |     |     |     |     | 570 |     |     |     |     | 575 |     |
| Thr | Leu | Ile | Asp | Trp | Tyr | Ser | Arg | Ser | Lys | Gly | His | Thr | Glu | Tyr | Phe |
|     |     |     | 580 |     |     |     |     | 585 |     |     |     |     | 590 |     |     |
| Ala | Pro | Asp | Gly | Ile | His | Leu | Glu | Asn | Asp | Gly | Val | Glu | Ala | Leu | Thr |
|     |     | 595 |     |     |     |     | 600 |     |     |     |     | 605 |     |     |     |
| Asp | Glu | Ile | Leu | Lys | Asn | Ile | Lys | Lys | Lys |     |     |     |     |     |     |
|     | 610 |     |     |     |     | 615 |     |     |     |     |     |     |     |     |     |

<210> 5852

<211> 51

<212> PRT

<213> S.epidermidis

<400> 5852

[illegible]

<210> 5853

<211> 127

<213> S.epidermidis

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Val | Ser | Leu | Met | Ser | Ile | Asn | Ser | Tyr | Leu | Ile | Ser | Ser | Leu | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Pro | Val | Leu | Ser | Ile | Ile | Ile | Trp | Leu | Phe | Tyr | Ser | Asn | His | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Asn | Leu | Ile | Asn | Ile | Leu | Phe | Tyr | Thr | Ser | Phe | Ile | Ile | Phe | Ile |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |
| Val | Ala | Phe | Leu | Ile | Leu | Leu | Ile | Gln | Glu | Gly | Ile | Phe | Asp | Ala | Thr |
|     |     |     | 50  |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Phe | Gly | Phe | Arg | Arg | Leu | Lys | Tyr | Gln | Leu | Ser | Ser | Thr | Lys | Arg |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     | 80  |     |
| Lys | Arg | Met | Met | Lys | Asn | Asp | His | Phe | Phe | Asn | Pro | Gln | Lys | Val | Lys |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Lys | Glu | Ser | Tyr | Ile | Ile | Ser | Pro | Trp | Val | Val | Pro | Thr | Leu | Ile | Ile |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asn | Leu | Thr | Tyr | Ile | Ile | Val | Ser | Ile | Gly | Val | Ser | Leu | Leu | Ile |     |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |

<211> 395

<213> S.epidermidis

|            |            |            |            |          |            |            |            |            |           |            |            |            |     |            |     |
|------------|------------|------------|------------|----------|------------|------------|------------|------------|-----------|------------|------------|------------|-----|------------|-----|
| Gln<br>1   | Met        | Lys        | Leu        | Ser<br>5 | Leu        | Asn        | Ser        | Ser        | Ser<br>10 | Lys        | Phe        | Leu        | Arg | Ala<br>15  | Pro |
| Ser        | Ile        | Arg        | Gln<br>20  | Phe      | Ser        | Asn        | Arg        | Ile<br>25  | Lys       | Ala        | Ile        | Asp<br>30  | Asp | Cys        | Val |
| Asn        | Leu        | Thr<br>35  | Ile        | Gly      | Gln        | Pro        | Asp<br>40  | Phe        | Pro       | Met        | Pro        | Asp<br>45  | Val | Val        | Lys |
| Asn<br>50  | Ala        | Tyr        | Ile        | Lys      | Ala        | Ile<br>55  | Lys        | Asn        | Asp       | Lys        | Thr<br>60  | Ser        | Tyr | Ser        | His |
| Asn<br>65  | Lys        | Gly        | Leu        | Phe      | Glu<br>70  | Thr        | Arg        | Glu        | Ala       | Ile<br>75  | Ser        | Gln        | Tyr | Phe        | Lys |
| Arg        | Lys        | Tyr        | Asn<br>85  | Phe      | Leu        | Tyr        | Ser        | Glu<br>90  | Glu       | Glu        | Ile        | Ile        | Val | Thr        | Asn |
| Gly        | Ala        | Ser<br>100 | Glu        | Ala      | Leu        | Asp        | Thr<br>105 | Ser        | Leu       | Arg        | Ser        | Ile<br>110 | Ile | Glu        | Pro |
| Gly        | Asp        | Asp<br>115 | Ile        | Leu      | Ile        | Pro        | Gly<br>120 | Pro        | Ile       | Tyr        | Ala        | Gly<br>125 | Tyr | Ile        | Pro |
| Leu<br>130 | Val        | Glu        | Thr        | Leu      | Gly        | Gly<br>135 | Asn        | Pro        | Val       | Tyr        | Ile<br>140 | Asp        | Thr | Thr        | Gln |
| Ser<br>145 | Asp        | Phe        | Lys        | Val      | Thr<br>150 | Pro        | Glu        | Leu        | Ile       | Glu<br>155 | Ser        | His        | Leu | Thr        | His |
| Lys        | Thr        | Lys        | Ala<br>165 | Ile      | Leu        | Leu        | Asn        | Tyr<br>170 | Pro       | Thr        | Asn        | Pro        | Thr | Gly<br>175 | Val |
| Ile        | Leu        | Glu<br>180 | Arg        | Ser      | Glu        | Val        | Lys<br>185 | Asn        | Ile       | Val        | Asp        | Thr<br>190 | Leu | Val        | Asn |
| Lys        | His<br>195 | Ile        | Phe        | Ile      | Ile        | Ser        | Asp<br>200 | Glu        | Ile       | Tyr        | Ala<br>205 | Glu        | Asn | Thr        | Phe |
| Lys<br>210 | Gly        | Gln        | His        | Thr      | Ser        | Phe<br>215 | Ala        | Glu        | Phe       | Pro        | Glu<br>220 | Ile        | Arg | Asp        | Gln |
| Leu        | Leu        | Leu        | Ile        | Gly      | Gly        | Leu        | Ser        | Lys        | Ser       | His        | Ser        | Ala        | Thr | Gly        | Ile |



|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |     |
| His | Thr | Thr | Thr | Leu | Asp | Ile | Gln | Phe | Thr | Glu | Ile | Leu | Lys | Tyr | Ile |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

&lt;210&gt; 5857

&lt;211&gt; 888

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5857

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Gly | Cys | Ser | Phe | Tyr | Phe | Leu | Gly | Gly | Arg | His | Met | Glu | Met | Lys |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Pro | Lys | Tyr | Asp | Pro | Arg | Glu | Val | Glu | Lys | Gly | Arg | Tyr | Glu | Glu | Trp |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Val | Ser | Asn | Gly | Tyr | Phe | Lys | Pro | Ser | Glu | Asp | Lys | Ser | Lys | Glu | Ala |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr | Thr | Ile | Val | Ile | Pro | Pro | Pro | Asn | Val | Thr | Gly | Lys | Leu | His | Leu |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Gly | His | Ala | Trp | Asp | Thr | Thr | Leu | Gln | Asp | Ile | Ile | Thr | Arg | Met | Lys |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Arg | Met | Gln | Gly | Tyr | Asp | Thr | Leu | Tyr | Leu | Pro | Gly | Met | Asp | His | Ala |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Gly | Ile | Ala | Thr | Gln | Ala | Lys | Val | Glu | Ala | Lys | Leu | Asn | Glu | Gln | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile | Ser | Arg | His | Asp | Leu | Gly | Arg | Glu | Lys | Phe | Leu | Gln | Gln | Ala | Trp |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asp | Trp | Lys | Glu | Glu | Tyr | Ala | Thr | Phe | Ile | Arg | Gln | Gln | Trp | Ala | Lys |
|     | 130 |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |     |
| Leu | Gly | Leu | Gly | Leu | Asp | Tyr | Ser | Arg | Glu | Arg | Phe | Thr | Leu | Asp | Asp |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Gly | Leu | Ser | Lys | Ala | Val | Arg | Lys | Val | Phe | Val | Asp | Leu | Tyr | Asn | Lys |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Gly | Ile | Ile | Tyr | Arg | Gly | Glu | Arg | Ile | Ile | Asn | Trp | Asp | Pro | Ile | Ala |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Arg | Thr | Ala | Leu | Ser | Asp | Ile | Glu | Val | Ile | His | Glu | Asp | Val | Gln | Gly |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ala | Phe | Tyr | His | Phe | Lys | Tyr | Pro | Tyr | Gly | Asp | Gly | Asn | Gly | Tyr | Ile |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Glu | Ile | Ala | Thr | Thr | Arg | Pro | Glu | Thr | Met | Leu | Gly | Asp | Thr | Ala | Ile |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |
| Val | Val | Asn | Pro | Asn | Asp | Glu | Arg | Tyr | Lys | Asp | Val | Ile | Gly | Lys | Thr |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Val | Ile | Leu | Pro | Ile | Val | Gly | Arg | Glu | Leu | Pro | Ile | Leu | Ala | Asp | Glu |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Tyr | Val | Asp | Ile | Glu | Phe | Gly | Ser | Gly | Ala | Met | Lys | Val | Thr | Pro | Ala |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| His | Asp | Pro | Asn | Asp | Phe | Glu | Ile | Gly | Gln | Arg | His | Gln | Leu | Glu | Asn |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Ile | Ile | Val | Met | Asp | Glu | Tyr | Gly | Lys | Met | Asn | Asp | Lys | Ala | Asp | Lys |
| 305 |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |     |
| Tyr | Lys | Gly | Met | Asp | Arg | Phe | Asp | Cys | Arg | Asn | Gln | Leu | Val | Lys | Asp |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Leu | Lys | Glu | Gln | Asp | Leu | Val | Ile | Lys | Ile | Glu | Glu | His | Thr | His | Ser |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Val | Gly | His | Ser | Glu | Arg | Ser | Gly | Ala | Ile | Val | Glu | Pro | Tyr | Leu | Ser |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Gln | Trp | Phe | Val | Lys | Met | Lys | Pro | Leu | Ala | Gln | Arg | Ala | Leu | Asp |
| 370 |     |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Asn | Gln | Asn | Thr | Lys | Asp | Arg | Ile | Asp | Phe | Phe | Pro | Gly | Arg | Phe | Glu |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Asn | Thr | Phe | Asn | Arg | Trp | Met | Glu | Glu | Ile | Arg | Asp | Trp | Thr | Ile | Ser |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Arg | Gln | Leu | Trp | Trp | Gly | His | Gln | Ile | Pro | Ala | Trp | Tyr | His | Lys | Asp |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Thr | Gly | Glu | Val | Phe | Val | Gly | Glu | Glu | Ala | Pro | Glu | Asp | Ile | Glu | Asn |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Trp | Ile | Gln | Asp | Glu | Asp | Val | Leu | Asp | Thr | Trp | Phe | Ser | Ser | Ala | Leu |
|     | 450 |     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |
| Trp | Pro | Phe | Ser | Thr | Leu | Gly | Trp | Pro | Asp | Thr | Asn | Ala | Asp | Asp | Phe |
| 465 |     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |
| Lys | Arg | Tyr | Tyr | Pro | Thr | Asn | Ala | Leu | Val | Thr | Gly | Tyr | Asp | Ile | Ile |
|     |     |     |     | 485 |     |     |     |     | 490 |     |     |     |     | 495 |     |
| Phe | Phe | Trp | Val | Ala | Arg | Met | Ile | Phe | Gln | Gly | Leu | Glu | Phe | Thr | Asp |
|     |     |     | 500 |     |     |     |     | 505 |     |     |     |     | 510 |     |     |
| Arg | Arg | Pro | Phe | Asn | Asp | Val | Leu | Leu | His | Gly | Leu | Val | Arg | Ala | Glu |
|     |     | 515 |     |     |     |     | 520 |     |     |     |     | 525 |     |     |     |
| Asp | Gly | Arg | Lys | Met | Ser | Lys | Ser | Leu | Gly | Asn | Gly | Val | Asp | Pro | Met |
|     | 530 |     |     |     |     | 535 |     |     |     |     | 540 |     |     |     |     |
| Asp | Val | Ile | Asp | Glu | Tyr | Gly | Ala | Asp | Ser | Leu | Arg | Tyr | Phe | Leu | Ala |
| 545 |     |     |     |     | 550 |     |     |     |     | 555 |     |     |     |     | 560 |
| Thr | Gly | Ser | Ser | Pro | Gly | His | Asp | Leu | Arg | Tyr | Ser | Thr | Glu | Lys | Val |
|     |     |     |     | 565 |     |     |     | 570 |     |     |     |     |     | 575 |     |
| Glu | Ser | Val | Trp | Asn | Phe | Ile | Asn | Lys | Ile | Trp | Asn | Ala | Ala | Arg | Phe |
|     |     | 580 |     |     |     |     |     | 585 |     |     |     |     | 590 |     |     |
| Ser | Leu | Met | Asn | Ile | Gly | Glu | Asp | Phe | Lys | Val | Glu | Asp | Ile | Asp | Leu |
|     |     | 595 |     |     |     |     | 600 |     |     |     |     | 605 |     |     |     |
| Ser | Gly | Asn | Leu | Ser | Leu | Ala | Asp | Gln | Trp | Ile | Leu | Thr | Arg | Leu | Asn |
|     | 610 |     |     |     |     | 615 |     |     |     |     | 620 |     |     |     |     |
| Glu | Thr | Ile | Ser | Thr | Val | Thr | Glu | Leu | Ser | Asp | Lys | Tyr | Glu | Phe | Gly |
| 625 |     |     |     |     | 630 |     |     |     |     | 635 |     |     |     |     | 640 |
| Glu | Val | Gly | Arg | Ala | Leu | Tyr | Asn | Phe | Ile | Trp | Asp | Glu | Phe | Cys | Asp |
|     |     |     |     | 645 |     |     |     |     | 650 |     |     |     |     | 655 |     |
| Trp | Tyr | Ile | Glu | Met | Ser | Lys | Ile | Pro | Met | Asn | Gly | Glu | Asp | Glu | Ser |
|     |     |     | 660 |     |     |     |     | 665 |     |     |     |     | 670 |     |     |
| Gln | Lys | Gln | Thr | Thr | Arg | Ser | Val | Leu | Ser | Tyr | Val | Leu | Asp | Lys | Ile |
|     |     |     | 675 |     |     |     | 680 |     |     |     |     | 685 |     |     |     |
| Met | Lys | Met | Leu | His | Pro | Phe | Met | Pro | Phe | Val | Thr | Glu | Thr | Ile | Trp |
|     | 690 |     |     |     |     | 695 |     |     |     |     | 700 |     |     |     |     |
| Gln | Ser | Leu | Pro | His | His | Gly | Glu | Thr | Ile | Val | Lys | Ala | Asn | Trp | Pro |
| 705 |     |     |     |     | 710 |     |     |     |     | 715 |     |     |     |     | 720 |
| Thr | Val | Asp | Gln | Ala | Leu | Ile | Phe | Asn | Glu | Ser | Lys | Gln | Thr | Met | Glu |
|     |     |     |     | 725 |     |     |     |     | 730 |     |     |     |     | 735 |     |
| Gln | Leu | Val | Glu | Ile | Ile | Lys | Ser | Val | Arg | Gln | Ser | Arg | Val | Glu | Val |
|     |     |     | 740 |     |     |     |     | 745 |     |     |     |     | 750 |     |     |
| Asn | Thr | Pro | Leu | Ser | Lys | Ala | Ile | Pro | Ile | Leu | Ile | Gln | Thr | Lys | Asp |
|     |     | 755 |     |     |     |     | 760 |     |     |     |     | 765 |     |     |     |
| Glu | Lys | Ile | Lys | His | Thr | Leu | Met | Asp | Asn | Ile | Ser | Tyr | Leu | His | Lys |
|     | 770 |     |     |     |     | 775 |     |     |     |     | 780 |     |     |     |     |
| Phe | Cys | Asn | Pro | Ser | Gln | Leu | Thr | Ile | Asp | Thr | Glu | Ile | Glu | Ile | Pro |
| 785 |     |     |     |     | 790 |     |     |     |     | 795 |     |     |     |     | 800 |
| Glu | Lys | Ala | Met | Thr | Thr | Val | Val | Val | Ala | Gly | Lys | Val | Val | Leu | Pro |
|     |     |     |     | 805 |     |     |     |     | 810 |     |     |     |     | 815 |     |



305                      310                      315                      320  
 Glu Leu Asp Arg Met Ile Gln Glu Phe Gly Gln Arg Ile Gln Gln Gln  
                                  325                      330                      335  
 Gly Leu Asp Leu Gln Thr Tyr Tyr Gln Ile Ser Gly Gln Asn Glu Glu  
                                  340                      345                      350  
 Gln Leu Arg Asp Gln Met Lys Asp Asp Ala Glu Gln Arg Val Lys Thr  
                                  355                      360                      365  
 Asn Leu Thr Leu Thr Ala Ile Ala Asp Glu Glu Asn Ile Glu Val Ser  
                                  370                      375                      380  
 Asp Glu Asp Ile Asp Lys Glu Leu Glu Lys Met Ser Glu Gln Phe Asn  
 385                      390                      395                      400  
 Ile Ser Val Glu Asp Ile Lys Ser Thr Leu Gly Asn Thr Asp Ile Val  
                                  405                      410                      415  
 Lys Asn Asp Val Arg Ile Gln Lys Val Ile Asp Leu Leu Arg Asp Asn  
                                  420                      425                      430  
 Ala Lys Tyr Val Glu Ala Thr Lys Glu Asp  
                                  435                      440

<210> 5859

<211> 57

<212> PRT

<213> S.epidermidis

<400> 5859

Phe His Cys Pro Ala Pro Lys Phe His Leu Thr Ser Thr Ile Ile Asn  
 1                      5                      10                      15  
 His Asn Asp Ala Ile Leu Ser Cys Gln Ser Ile Gln Leu Thr Leu Ser  
                                  20                      25                      30  
 Ile Phe Asn Leu Thr Tyr Arg Gln Leu Thr Asn Ser Ile Leu Cys Ile  
                                  35                      40                      45  
 His Leu Met Asn Asp Thr Ser Leu Leu  
                                  50                      55

<210> 5860

<211> 422

<212> PRT

<213> S.epidermidis

<400> 5860

Lys Arg Met Phe Lys Phe Asn Glu Asp Glu Glu Asn Leu Lys Cys Ser  
 1                      5                      10                      15  
 Phe Cys Gly Lys Asp Gln Asp Gln Val Lys Lys Leu Val Ala Gly Ser  
                                  20                      25                      30  
 Gly Val Tyr Ile Cys Asn Glu Cys Ile Glu Leu Cys Ser Glu Ile Val  
                                  35                      40                      45  
 Glu Glu Glu Leu Ala Gln Asn Thr Ser Glu Gly Phe Thr Glu Leu Pro  
                                  50                      55                      60  
 Thr Pro Lys Glu Ile Met Asp His Leu Asn Glu Tyr Val Ile Gly Gln  
 65                      70                      75                      80  
 Glu Lys Ala Lys Lys Ser Leu Ala Val Ala Val Tyr Asn His Tyr Lys  
                                  85                      90                      95  
 Arg Ile Gln Gln Leu Gly Pro Asn Glu Asp Asp Val Glu Leu Gln Lys  
                                  100                      105                      110  
 Ser Asn Ile Ala Leu Ile Gly Pro Thr Gly Ser Gly Lys Thr Leu Leu  
                                  115                      120                      125  
 Ala Gln Thr Leu Ala Lys Thr Leu Asn Val Pro Phe Ala Ile Ala Asp



130 135 140  
 Ala Thr Ser Leu Thr Glu Ala Gly Tyr Val Gly Asp Asp Val Glu Asn  
 145 150 155 160  
 Ile Leu Leu Arg Leu Ile Gln Ala Ala Asp Phe Asp Ile Asp Lys Ala  
 165 170 175  
 Glu Lys Gly Ile Ile Tyr Val Asp Glu Ile Asp Lys Ile Ala Arg Lys  
 180 185 190  
 Ser Glu Asn Thr Ser Ile Thr Arg Asp Val Ser Gly Glu Gly Val Gln  
 195 200 205  
 Gln Ala Leu Leu Lys Ile Leu Glu Gly Thr Thr Ala Ser Val Pro Pro  
 210 215 220  
 Gln Gly Gly Arg Lys His Pro Asn Gln Glu Leu Ile Gln Ile Asp Thr  
 225 230 235 240  
 Thr Asn Ile Leu Phe Ile Leu Gly Gly Ala Phe Asp Gly Ile Asp Glu  
 245 250 255  
 Val Ile Lys Arg Arg Leu Gly Glu Lys Val Ile Gly Phe Ala Ser Asn  
 260 265 270  
 Glu Ala Asp Lys Tyr Asp Glu Glu Ala Leu Leu Glu Gln Ile Arg Pro  
 275 280 285  
 Glu Asp Leu Gln Ser Tyr Gly Leu Ile Pro Glu Phe Ile Gly Arg Val  
 290 295 300  
 Pro Ile Val Ala Asn Leu Glu Thr Leu Asp Val Ala Ala Leu Lys Asn  
 305 310 315 320  
 Ile Leu Thr Gln Pro Lys Asn Ala Leu Val Lys Gln Tyr Thr Lys Met  
 325 330 335  
 Leu Glu Leu Asp Asn Val Glu Leu Glu Phe Ser Glu Glu Ala Leu Ser  
 340 345 350  
 Ala Ile Ser Glu Lys Ala Ile Glu Arg Lys Thr Gly Ala Arg Gly Leu  
 355 360 365  
 Arg Ser Ile Ile Glu Glu Ala Leu Ile Asp Ile Met Tyr Asp Val Pro  
 370 375 380  
 Ser Ser Glu Asn Val Ser Lys Val Val Ile Thr Glu Gln Thr Ile Asn  
 385 390 395 400  
 Glu Glu Ile Glu Pro Glu Leu Tyr Asp Asp Glu Gly Asn Leu Ile Asn  
 405 410 415  
 Lys Asn Lys Thr Ser Ala  
 420

&lt;210&gt; 5861

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5861

Leu Ile Arg Thr Arg His Leu Leu Lys Ile Phe Asp Leu Arg Leu Ser  
 1 5 10 15  
 His Val Asn Cys Asp Ser Val Phe Leu Tyr Val Asn Ile Glu Lys Asn  
 20 25 30  
 Val Lys Val Val Asn Tyr Thr Ile Val  
 35 40

&lt;210&gt; 5862

&lt;211&gt; 46

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

5861  
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 5900

&lt;400&gt; 5862

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Lys | Asn | Ala | Leu | Ile | Ser | Thr | Phe | Lys | Ala | Met | Leu | Cys | His | Gln |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr | Ser | Lys | Phe | His | Leu | Glu | Ile | Gln | Gln | Thr | Arg | Arg | Val | Gly | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Trp | Gly | Pro | Asn | Lys | Lys | Asn | Phe | Thr | Glu | Lys | Phe | Asn | Arg |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

&lt;210&gt; 5863

&lt;211&gt; 48

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5863

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Lys | Met | Ala | Glu | Gln | Ser | Lys | Glu | Lys | Gln | Ala | Asn | Glu | Gln | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys | Ala | Gln | Asn | Leu | Phe | Ala | Arg | Trp | Arg | Lys | Glu | Glu | Thr | Leu | Tyr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Glu | Asp | Glu | Lys | Lys | Asp | Lys | Ser | Ser | Lys | Lys | Lys | Asp | Lys | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

&lt;210&gt; 5864

&lt;211&gt; 192

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5864

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Thr | Asn | Phe | Ser | His | Ile | Glu | Val | Phe | Trp | Val | Leu | Lys | Phe | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Asn | Asn | Lys | Leu | Ile | Val | Val | Leu | Cys | Ala | Met | Ile | Ile | Phe | Ile |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Leu | Ile | Gly | Leu | Ser | Ile | Arg | Ser | Gln | Thr | Gln | Ser | Pro | Ala | Glu |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gln | Tyr | Val | Gly | Asp | Ser | Val | Ser | Phe | Gly | Gln | Arg | Val | Ile | Ser | Tyr |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Pro | Ile | Gln | Phe | Val | Thr | Gly | Ser | Ile | Gly | Asp | Leu | Phe | Glu | Lys | Gly |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Ser | Ser | Lys | Lys | Asp | Lys | Asn | Lys | Ile | Lys | Gln | Leu | Glu | Ala | Lys | Asn |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Glu | Glu | Leu | Glu | Ser | Glu | Asn | Lys | Lys | Tyr | Lys | Lys | Glu | Leu | Asp | Ile |
|     |     |     | 100 |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Lys | Asp | Leu | Ser | Lys | Tyr | Glu | Pro | Ile | Ser | Thr | Ser | Val | Ile | Ala | Arg |
|     |     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Asn | Pro | Asp | Gln | Trp | Met | Asn | Thr | Ile | Leu | Ile | Asp | Lys | Gly | Ser | Lys |
|     | 130 |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |     |
| Ala | Gly | Ile | Lys | Asn | Asn | Met | Ala | Val | Met | Thr | Thr | Arg | Arg | Ile | Ser |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Trp | Lys | Ser | Thr | Lys | Val | Asn | His | Phe | His | Pro | Ser | Arg | Pro | Tyr | Phe |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |
| His | Ser | Tyr | Ser | Ser | Arg | Lys | Ile | Phe | Val | Asn | Ile | His | His | Arg | Thr |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |

&lt;210&gt; 5865

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5865

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Ser Asn His Tyr Leu Pro Ile Pro His Asn Asp Pro Phe Gln Leu Leu
1          5          10          15
Leu Asp His Ile Leu Val Ser Phe Pro Tyr Val Tyr Leu Leu Lys Asn
20          25          30
Lys Lys Asn Ile His Pro Ile Lys Asn Arg Thr Asp Val Leu Phe Arg
35          40          45
Gly Thr Thr Tyr Ile Gln Glu Ile Ile His Ser Phe Leu Gln Ala
50          55          60
Leu Lys Ser Leu Ile Asn Ala His Thr Arg Leu Leu Pro Thr Cys Arg
65          70          75          80
Leu Cys Phe Asn Arg Ser Tyr Lys Ile Gly Leu Pro Ser Asp Leu Ile
85          90          95
Ile Tyr Ile Phe Thr Ala Thr Ile Cys Ser Leu
100          105

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&lt;210&gt; 5866

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5866

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Tyr Tyr Ile Tyr Asn Ile Ser Asp Leu Arg Arg Phe Asn Ile Met Ser
1          5          10          15
Ile Leu Thr Ile Ile Leu Ile Val Leu Leu Val Ile Leu Leu Phe Lys
20          25          30
Val Gly Leu Ser Ile Leu Arg Phe Leu Ile Ser Val Gly Ile Val Leu
35          40          45
Leu Cys Ile Tyr Leu Gly Tyr Gln Gly Val Leu Trp Leu Phe Glu His
50          55          60
Phe Gln Asn Phe Ser Gly Phe Ile Arg
65          70

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&lt;210&gt; 5867

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5867

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Val Ile Leu Gln Leu Lys Ile Val Asn Ser Lys Lys Phe Gly Thr Leu
1          5          10          15
Leu Lys His Ile Tyr Lys Phe Phe Gln Leu Glu Lys Cys Ile Leu Thr
20          25          30
Thr Ile Lys Lys Cys Arg Tyr Phe Gly Lys Lys Leu Asn Val Asp Tyr
35          40          45
Asn Leu Ser Asn Leu Phe Lys His Ser Thr
50          55

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&lt;210&gt; 5868

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5868

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Asn Ser Ser His Ile Tyr Phe Cys Leu Arg Leu Phe Ile Ile Asn Val

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1                    5                    10                    15  
 Glu Glu Cys Asp Ile Cys Tyr Tyr Leu Pro Ile Leu Val Ala Leu Tyr  
                   20                    25                    30  
 Leu Val Phe Phe Ile Asn Phe Ala Ile Lys Ile Tyr  
                   35                    40

<210> 5869

<211> 53

<212> PRT

<213> S.epidermidis

<400> 5869

Lys Val Phe Lys Leu Ile Arg Ile Asn Pro Ile Lys Leu Arg Lys Lys  
 1                    5                    10                    15  
 Thr Glu Lys Phe Ile Thr Leu Ile Lys Phe Asn Ile Asn Glu Ile Asp  
                   20                    25                    30  
 Ile Ile Ile Gln Val Lys Glu Lys Lys Thr Ser Asn Ile Glu Pro Ser  
                   35                    40                    45  
 Gly Thr Cys Leu Val  
                   50

<210> 5870

<211> 126

<212> PRT

<213> S.epidermidis

<400> 5870

Arg Ser Ser Lys Glu Glu Phe Ile Met Pro Arg Val Lys Gly Gly Thr  
 1                    5                    10                    15  
 Val Thr Arg Ala Arg Arg Lys Lys Thr Ile Lys Leu Ala Lys Gly Tyr  
                   20                    25                    30  
 Phe Gly Ser Lys His Thr Leu Tyr Lys Val Ala Lys Gln Gln Val Met  
                   35                    40                    45  
 Lys Ser Gly Gln Tyr Ala Phe Arg Asp Arg Arg Gln Arg Lys Arg Asp  
                   50                    55                    60  
 Phe Arg Lys Leu Trp Ile Thr Arg Ile Asn Ala Ala Ala Arg Gln His  
 65                    70                    75                    80  
 Asp Ile Ser Tyr Ser Arg Leu Met Asn Gly Leu Lys Lys Ala Glu Ile  
                   85                    90                    95  
 Asp Ile Asn Arg Lys Met Leu Ser Glu Ile Ala Ile Ser Asp Asp Lys  
                   100                    105                    110  
 Ala Phe Ala Glu Leu Val Ser Lys Ala Lys Glu Ala Leu Lys  
                   115                    120                    125

<210> 5871

<211> 47

<212> PRT

<213> S.epidermidis

<400> 5871

Val Val Pro Lys Ile Ser Val Trp Ser Ser Pro Ile Leu Val Ser Met  
 1                    5                    10                    15  
 Asp Ser Thr Gly Leu Lys Thr Phe Val Glu Ser Phe Leu Ile Pro Lys  
                   20                    25                    30  
 Pro Ala Ser Ile Ile Thr Lys Ser Thr Gly Phe Ile Ser Pro Lys  
                   35                    40                    45

<210> 5872  
 <211> 309  
 <212> PRT  
 <213> S.epidermidis

<400> 5872

Arg Met Arg Lys Leu Ile Val Gly Ser Arg Arg Ser Lys Leu Ala Leu  
 1 5 10 15  
 Thr Gln Ser Gln Gln Phe Ile Asp Lys Leu Lys Phe Ile Asp Pro Ser  
 20 25 30  
 Leu Asp Ile Glu Ile Lys Glu Ile Val Thr Lys Gly Asp Lys Ile Val  
 35 40 45  
 Asp Lys Gln Leu Ser Lys Val Gly Gly Lys Gly Leu Phe Val Lys Glu  
 50 55 60  
 Ile Gln Asn Glu Leu Phe Asn Lys Glu Ile Asp Met Ala Ile His Ser  
 65 70 75 80  
 Leu Lys Asp Val Pro Ser Met Ile Pro Asp Gly Leu Thr Leu Gly Cys  
 85 90 95  
 Ile Pro Asp Arg Glu Ile Pro Phe Asp Ala Tyr Ile Ala Lys Asn His  
 100 105 110  
 Ile Pro Leu Gln Glu Leu Ser Glu Gly Ser Ile Val Gly Thr Ser Ser  
 115 120 125  
 Leu Arg Arg Gly Ala Gln Ile Leu Ser Lys Tyr Pro His Leu Lys Ile  
 130 135 140  
 Lys Trp Ile Arg Gly Asn Ile Asp Thr Arg Leu Lys Lys Leu Glu Thr  
 145 150 155 160  
 Glu Asp Tyr Asp Ala Ile Ile Leu Ala Ala Gly Leu Lys Arg Met  
 165 170 175  
 Gly Trp Ser Asp Asn Ile Val Thr Thr Tyr Leu Asp Arg Asp Ile Leu  
 180 185 190  
 Leu Pro Ala Ile Gly Gln Gly Ala Leu Gly Ile Glu Cys Arg Ser Asp  
 195 200 205  
 Asp Lys Glu Leu Leu Asp Leu Leu Ser Lys Val His Asn His Asp Val  
 210 215 220  
 Ala Gln Cys Val Thr Ala Glu Arg Thr Phe Leu Ser Glu Met Asp Gly  
 225 230 235 240  
 Ser Cys Gln Val Pro Ile Gly Gly Tyr Ala Thr Ile Ala Gln Asp Asn  
 245 250 255  
 Gln Ile Glu Phe Thr Gly Leu Ile Met Ser Pro Asp Gly Lys Glu Arg  
 260 265 270  
 Tyr Glu His Thr Ala Leu Gly Thr Asp Pro Val Lys Leu Gly Ile Glu  
 275 280 285  
 Val Ser Gln Val Leu Lys Lys Gln Gly Ala Tyr Asp Ile Ile Lys Lys  
 290 295 300  
 Leu Asn Glu Ala Glu  
 305

<210> 5873  
 <211> 49  
 <212> PRT  
 <213> S.epidermidis

<400> 5873

Ile His Asn Lys Thr Met Pro Thr Glu Ile Lys Lys Arg Asn Ile Asp  
 1 5 10 15

Asn Pro Thr Leu Asn Lys Arg Met Thr Ser Lys Thr Ile Lys Ile Ile  
                   20                  25                  30  
 Val Lys Met Leu Ile Met Leu Asn Leu Leu Lys Ser Leu Ile Leu Tyr  
                   35                  40                  45  
 Met

<210> 5874  
 <211> 173  
 <212> PRT  
 <213> S.epidermidis

<400> 5874  
 Ile Ile Leu Asn Leu Ile Cys Lys Arg Arg Ala Tyr Met Arg Tyr Ile  
 1                  5                  10                  15  
 Phe Ser Val Ile Lys Asn Ile Ile Ala Val Leu Ala Ile Ile Leu Ile  
                   20                  25                  30  
 Ile Tyr Ile Ala Leu Gln His Ala Pro Phe Leu Lys Asn Gln Glu Trp  
                   35                  40                  45  
 Asn Pro Leu Asn Asp Met Asn Asn His His Gln Asn Ile Thr Gln Lys  
                   50                  55                  60  
 Val Ser Gln Lys Asn Asn Thr Leu Tyr Ser Gln Pro Ser Asn Asp Lys  
 65                  70                  75                  80  
 Ser Tyr Ile Leu Lys Glu Asn Asp Ile Ile Asn Asn Val Pro Ala Gly  
                   85                  90                  95  
 Gln Ile Lys Thr Val Phe Asn Met Ile Asp Lys Ala Glu Phe Met Ser  
                   100                  105                  110  
 Val Ser Gly Leu Glu Arg Met Gly Phe Asn Asp Glu Tyr Leu Ala Gly  
                   115                  120                  125  
 Gln Gln Gly Asp Glu Phe Ile Tyr Lys Phe Gly Asp Asp Tyr Ile  
                   130                  135                  140  
 Arg Val Tyr Asn Thr Glu Phe Glu Met Asn Glu Asp Leu Asn Gln Leu  
 145                  150                  155                  160  
 Lys Gln Pro Ile Asn Leu Lys Pro Ile Glu Ala Tyr Gln  
                   165                  170

<210> 5875  
 <211> 46  
 <212> PRT  
 <213> S.epidermidis

<400> 5875  
 His Leu Leu Lys Glu Asp Met Asn Thr Thr Tyr Arg Leu Lys Glu Cys  
 1                  5                  10                  15  
 Gly Asp Ile Leu Gly Ile Asn Leu Leu Asp His Ile Ile Ile Gly Asp  
                   20                  25                  30  
 Asn Lys Phe Thr Ser Leu Val Glu Ala Gly Tyr Phe Asp Lys  
                   35                  40                  45

<210> 5876  
 <211> 61  
 <212> PRT  
 <213> S.epidermidis

<400> 5876  
 Lys Val Gly Asn Lys Met Lys Phe Asp Arg His Arg Arg Leu Arg Ser



225                      230                      235                      240  
 Ile Arg Ile Lys Lys Trp Ile Ser Gln Arg Asn Leu Ile Tyr Phe Asn  
                                  245                      250                      255  
 Ile Ile Leu Phe Cys Leu Cys Met Ile Asn Leu Phe Phe Leu Thr His  
                                  260                      265                      270  
 Phe Arg

<210> 5879

<211> 87

<212> PRT

<213> S.epidermidis

<400> 5879

Ser Ser Ala Leu Val Glu Leu Ile Thr Met Ser Val Val Ser Asn Lys  
 1                      5                      10                      15  
 Asp Gly Asn Ala Glu Ser Glu Ser Tyr Glu Thr Leu Cys Phe Ser Ala  
                                  20                      25                      30  
 Lys Ile Leu Ala Leu Asp Asn Val Arg Leu Thr Ile Val Thr Phe Glu  
                                  35                      40                      45  
 Ile Pro Glu Pro Lys Arg Phe Lys Ser Asp Asn Ser Pro Ile Ser Pro  
                                  50                      55                      60  
 Ala Pro Ile Thr Thr Ala Cys Leu Leu Phe Asn Phe Pro Asn Thr Phe  
 65                      70                      75                      80  
 Leu Ala Asn Ser Thr Ala Ala  
                                  85

<210> 5880

<211> 208

<212> PRT

<213> S.epidermidis

<400> 5880

Tyr Ile Ile Leu Leu Ile Tyr Ile Ile Met Asp Ile Lys Ile Ser Gln  
 1                      5                      10                      15  
 Cys Ile Gly Asp Glu Ile Met Asn Glu Cys Ala Phe Asn Thr Thr Asp  
                                  20                      25                      30  
 Pro Ile Tyr Ile Glu Tyr His Asp Tyr Tyr Trp Gly Gln Pro Ile Tyr  
                                  35                      40                      45  
 Asp Ser Lys Glu Leu Phe Lys Leu Met Ala Leu Glu Ser Gln His Ala  
                                  50                      55                      60  
 Gly Leu Ser Trp Leu Thr Ile Leu Lys Lys Lys Glu Ser Tyr Glu Gln  
 65                      70                      75                      80  
 Ala Phe Tyr Asn Phe Glu Pro Gln Phe Ile Ala His Met Thr Glu Gln  
                                  85                      90                      95  
 Asp Ile Asp Tyr Leu Met Lys Phe Pro Asn Ile Ile His Asn Arg Lys  
                                  100                      105                      110  
 Lys Leu Glu Ala Ile Val Ser Gln Ala Lys Gly Tyr Leu Lys Ile Glu  
                                  115                      120                      125  
 Lys Asp Tyr Gly Ser Phe Ser Lys Phe Leu Trp Ser Tyr Val Asn His  
                                  130                      135                      140  
 Gln Pro Ile Asn Met Gly Tyr Lys Lys Pro Arg Asp Arg Lys Lys Val  
 145                      150                      155                      160  
 Asp Gln Arg Ala Thr Gln Leu Ser Lys Asp Leu Lys Ala Tyr Gly Phe  
                                  165                      170                      175  
 Lys Phe Leu Gly Pro Val Thr Val Phe Ser Phe Leu Glu Ala Ala Gly



|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Leu | Tyr | Asp | Ser | His | Leu | Glu | Gly | Cys | Pro | Phe | Lys | Pro | Asn | His | Glu |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |

<210> 5881  
 <211> 205  
 <212> PRT  
 <213> S.epidermidis

<400> 5881

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Leu | Tyr | Asn | Ser | Ile | Arg | Lys | Arg | Lys | Ser | Met | Asn | Ile | Asn | Phe | Asn |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Asn | Ile | Asn | Leu | Ile | Ile | Ser | Ala | Val | Lys | Lys | Ala | Gln | Tyr | Pro | Asp |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Thr | Gly | Leu | Thr | Glu | Val | Ala | Leu | Ser | Gly | Arg | Ser | Asn | Val | Gly | Lys |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Ser | Thr | Phe | Ile | Asn | Ser | Met | Ile | Gly | Arg | Lys | Asn | Met | Ala | Arg | Thr |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Ser | Gln | Gln | Pro | Gly | Lys | Thr | Gln | Thr | Leu | Asn | Phe | Tyr | Asn | Ile | Asp |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |  |
| Glu | Gln | Leu | Ile | Phe | Val | Asp | Val | Pro | Gly | Tyr | Gly | Tyr | Ala | Lys | Val |  |  |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |
| Ser | Lys | Val | Gln | Arg | Glu | Lys | Phe | Gly | Lys | Met | Ile | Glu | Glu | Tyr | Ile |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Thr | Gln | Arg | Glu | Asn | Leu | Lys | Leu | Val | Ile | Gln | Leu | Val | Asp | Leu | Arg |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |  |  |
| His | Gln | Pro | Thr | Glu | Asp | Asp | Val | Leu | Met | Tyr | Asn | Tyr | Leu | Lys | His |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Phe | Asp | Ile | Pro | Thr | Leu | Val | Ile | Cys | Thr | Lys | Glu | Asp | Lys | Ile | Ala |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Lys | Gly | Lys | Val | Gln | Lys | His | Ile | Lys | Arg | Ile | Lys | Asp | Lys | Leu | Glu |  |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Leu | Glu | Ser | Gly | Asp | Asn | Ile | Ile | Ser | Tyr | Ser | Ser | Ile | Lys | Asn | Ser |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Lys | Gln | Gln | Glu | Ile | Trp | Asn | Phe | Ile | Glu | Thr | Tyr | Ile |     |     |     |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |

<210> 5882  
 <211> 358  
 <212> PRT  
 <213> S.epidermidis

<400> 5882

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Ser | Gly | Ile | Leu | Lys | Arg | Asn | Phe | Ile | Asn | Asn | Leu | Ile | Ile | Leu | Leu |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Ile | Ala | Ile | Met | Leu | Ser | Leu | Leu | Leu | Lys | Met | Leu | His | Val | Ile | Leu |  |  |
|     |     |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |  |  |
| Pro | Phe | Met | Phe | Gly | Pro | Ile | Leu | Ala | Ala | Leu | Leu | Cys | Val | Lys | Val |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Leu | Lys | Leu | Lys | Ile | Arg | Trp | Pro | Phe | Trp | Leu | Ser | Gln | Ile | Gly | Leu |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Ile | Leu | Leu | Gly | Val | Gln | Ile | Gly | Ser | Thr | Phe | Thr | Gln | Gln | Val | Ile |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |  |
| Lys | Asp | Ile | Ser | Lys | Asn | Trp | Leu | Thr | Ile | Val | Phe | Val | Thr | Ile | Leu |  |  |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |
| Leu | Ile | Leu | Leu | Ala | Leu | Ile | Ile | Ala | Phe | Phe | Phe | Lys | Lys | Ile | Ala |  |  |

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<210> 5883
<211> 427
<212> PRT
<213> S.epidermidis
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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | His | Arg | Ser | Met | Ile | Met | Asn | Tyr | Leu | Asp | Ser | Leu | Tyr | Trp | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| His | Glu | Arg | Ser | Lys | Phe | Gly | Ile | Lys | Pro | Gly | Val | Lys | Arg | Met | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Trp | Met | Leu | Glu | Gln | Leu | Asn | Asn | Pro | Gln | His | Lys | Ile | Arg | Gly | Ile |
|     |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| His | Val | Gly | Gly | Thr | Asn | Gly | Lys | Gly | Ser | Thr | Val | Ala | Tyr | Leu | Arg |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Ala | Leu | Ile | Glu | Asn | Asp | Tyr | Ser | Val | Gly | Thr | Phe | Thr | Ser | Pro |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Phe | Ile | Glu | Ser | Phe | Asn | Glu | Arg | Ile | Ser | Leu | Asn | Gly | Val | Pro | Ile |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Met | Asn | Asp | Glu | Ile | Val | Gln | Leu | Val | Glu | Arg | Val | Lys | Pro | Val | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Glu | Ala | Leu | Glu | Ile | Glu | Thr | Asp | Leu | Gly | Gly | Ala | Thr | Glu | Phe | Glu |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |

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Ile Ile Thr Thr Met Met Phe Leu Tyr Phe Gly Glu Ile Asn Pro Val
130 135 140
Asp Phe Val Ile Ile Glu Ala Gly Leu Gly Ile Lys Asn Asp Ser Thr
145 150 155 160
Asn Val Phe Lys Pro Val Leu Ser Ile Leu Thr Ser Ile Gly Leu Asp
165 170 175
His Thr Asp Ile Leu Gly Thr Thr Tyr Leu Asp Ile Ala Lys Asp Lys
180 185 190
Ala Ala Ile Ile Lys Pro His Ile Pro Ile Val Tyr Ala Val Lys Asn
195 200 205
Asp Asp Ala Leu Lys Tyr Val Arg Asp Tyr Ala Leu Glu Gln Asn Ala
210 215 220
Lys Pro Ile Glu Leu Asp Arg Glu Ile Thr Val Val Ser Gln Asp Asp
225 230 235 240
Glu Phe Thr Tyr Arg Tyr Lys Asp Tyr Glu Leu Glu Thr Ile Ile Leu
245 250 255
Asn Met Leu Gly Glu His Gln Lys Glu Asn Ala Ala Leu Ala Ile Thr
260 265 270
Ala Leu Ile Glu Leu Asn Glu Arg Gln Ile Ile Glu Leu Asp Phe Asn
275 280 285
Lys Met Ile Asp Gly Ile Glu Ser Val Asn Trp Thr Gly Arg Ile Glu
290 295 300
Gln Val Lys Glu Gln Pro Leu Met Val Ile Asp Gly Ala His Asn Asn
305 310 315 320
Arg Ser Ile Asp Ala Leu Val Asp Thr Ile Arg His Tyr Tyr Gly Arg
325 330 335
Asp Lys Ile Asp Ile Leu Phe Ser Ala Ile Lys Gly Lys Pro Ile His
340 345 350
Ser Met Ile Asn Lys Leu Asn Asp Ile Ala Ser Lys Phe Tyr Ile Ala
355 360 365
Asp Phe Glu Phe Pro Lys Ala Leu Ala Lys Glu Glu Ile Ala Glu Glu
370 375 380
Leu Lys Leu Asp Asn Leu His Leu Ile Asp Asp Tyr Val Asp Phe Ile
385 390 395 400
Glu Asn Tyr Glu Gly Asp Gly Leu Ile Ile Thr Gly Ser Leu Tyr Phe
405 410 415
Ile Ser Glu Val Lys Ala Lys Ile Asn Phe Asn
420 425

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&lt;210&gt; 5884

&lt;211&gt; 229

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5884

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Asn Lys Phe Met Lys Pro Val Ile Val Met Thr Gln Thr Asn Glu Val
1 5 10 15
His Ser His Leu Val Asp Ile Ile His Lys Pro Phe Ile Gln Leu Lys
20 25 30
Gln Leu His Phe Asn Glu Lys Leu Leu Asp His Ser Tyr Asp Trp Leu
35 40 45
Ile Phe Ser Ser Lys Asn Ala Val Lys Tyr Phe Tyr Pro Tyr Leu Lys
50 55 60
Asn Val Lys Val Lys Lys Val Ala Val Ile Gly Asp Lys Thr Ala Gln
65 70 75 80
Tyr Cys Asn Glu Leu Gly Ile Ser Val Asp Phe Val Pro Arg Asp Phe

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |
| Ser | Gln | Glu | Gly | Phe | Leu | Asp | Glu | Phe | Lys | Ile | Ser | Glu | Gln | His | Leu |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Leu | Leu | Pro | Ser | Ser | Glu | Lys | Ala | Arg | Ser | Lys | Leu | Val | Gln | Gln | Leu |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Ser | Lys | Tyr | Asn | Glu | Val | Val | Lys | Ile | Asp | Leu | Tyr | Arg | Pro | Val | Pro |  |  |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Asn | Phe | Lys | Asn | Ile | Ser | Gln | Val | Lys | Ser | Leu | Val | Arg | Lys | His | Gln |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Ile | Asp | Ala | Val | Thr | Phe | Ser | Ser | Ser | Ser | Ala | Val | Glu | Phe | Tyr | Phe |  |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Lys | Glu | Asp | Asn | Val | Pro | Glu | Phe | Asp | His | Tyr | Phe | Ala | Ile | Gly | Lys |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Gln | Thr | Ala | Arg | Thr | Ile | Leu | Lys | Phe | Asn | Thr | Ser | Val | Lys | Val | Ala |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |
| Asn | Lys | Gln | Thr | Leu | Asp | Ser | Leu | Ile | Asp | Lys | Ile | Ile | Glu | Ser | Arg |  |  |
|     | 210 |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |     |  |  |
| Glu | Gln | Asn | Glu | Ile |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 225 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

&lt;210&gt; 5885

&lt;211&gt; 431

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5885

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Gly | Gly | His | Met | Met | Ser | Phe | Glu | Lys | Ser | Ile | Lys | Ala | Met | Glu | Gln |  |  |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     | 15  |     |     |  |  |
| Ala | Glu | Lys | Leu | Met | Pro | Gly | Gly | Val | Asn | Ser | Pro | Val | Arg | Ala | Phe |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |  |  |
| Lys | Ser | Val | Asp | Thr | Pro | Ala | Ile | Phe | Met | Asp | His | Gly | Glu | Gly | Ser |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |  |  |
| Lys | Ile | Tyr | Asp | Ile | Asp | Gly | Asn | Glu | Tyr | Ile | Asp | Tyr | Val | Leu | Ser |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |  |  |
| Trp | Gly | Pro | Leu | Ile | Leu | Gly | His | Lys | Asn | Gln | Gln | Val | Ile | Ser | Lys |  |  |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |  |  |
| Leu | His | Glu | Ala | Val | Asp | Lys | Gly | Thr | Ser | Phe | Gly | Ala | Ser | Thr | Leu |  |  |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     | 95  |     |     |  |  |
| Gln | Glu | Asn | Lys | Leu | Ala | Glu | Leu | Val | Ile | Asp | Arg | Val | Pro | Ser | Ile |  |  |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     | 110 |     |     |     |  |  |
| Glu | Lys | Val | Arg | Met | Val | Ser | Ser | Gly | Thr | Glu | Ala | Thr | Leu | Asp | Thr |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Leu | Arg | Leu | Ala | Arg | Gly | Tyr | Thr | Gly | Arg | Asn | Lys | Ile | Ile | Lys | Phe |  |  |
|     | 130 |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |     |  |  |
| Glu | Gly | Cys | Tyr | His | Gly | His | Ser | Asp | Ser | Leu | Leu | Ile | Lys | Ala | Gly |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Ser | Gly | Val | Ala | Thr | Leu | Gly | Leu | Pro | Asp | Ser | Pro | Gly | Val | Pro | Glu |  |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Gly | Ile | Ala | Lys | Asn | Thr | Ile | Thr | Val | Pro | Tyr | Asn | Asp | Leu | Asp | Ser |  |  |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     | 190 |     |     |     |  |  |
| Leu | Lys | Leu | Ala | Phe | Glu | Lys | Tyr | Gly | Asp | Asp | Ile | Ala | Gly | Val | Ile |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |
| Val | Glu | Pro | Val | Ala | Gly | Asn | Met | Gly | Val | Val | Pro | Pro | Val | Asn | Gly |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Phe | Leu | Gln | Gly | Leu | Arg | Asp | Ile | Thr | Asn | Glu | Tyr | Gly | Ala | Leu | Leu |  |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |  |





Leu Gln Ala Ala Phe Glu Leu Gly Glu Arg Ile Asn Ser Thr Ser Thr  
           115                  120          125  
 Phe Asp Lys Val Gln Ile Thr His Pro Ser Asp Val Ala Ser Leu Met  
           130                  135          140  
 Met Ser Thr Met Lys Asp Leu Glu Gln Glu His Phe Val Val Leu Leu  
   145                  150          155          160  
 Leu Asn Ser Lys Asn Ile Val Thr Lys Gln Ala Trp Val Tyr Lys Gly  
                   165          170          175  
 Thr Leu Asn Ser Ser Ile Ile His Pro Arg Glu Val Phe Asn Ile Ala  
           180                  185          190  
 Ile Arg Glu Ser Ser Asn Ser Ile Ile Val Val His Asn His Pro Ser  
           195                  200          205  
 Gly Asp Val Thr Pro Ser Glu Arg Gly Tyr Glu Tyr Asn Val  
           210                  215          220

<210> 5890

<211> 319

<212> PRT

<213> S.epidermidis

<400> 5890

Phe Phe Lys Ile Tyr His Asp Trp Ser Ala Lys Leu Met Ala Asp Ile  
 1                  5                  10          15  
 Ile Pro Phe Pro Gln Phe Lys Ser Lys Met Ile Lys Gln Ile Asn Asp  
           20                  25          30  
 Ala Glu Arg Asn Ala Asp Phe Glu Lys Met Tyr Gln Leu Phe Asn Val  
           35                  40          45  
 Tyr Glu Gln His Phe Asp Pro Asn Glu Glu Ile Ala Leu Lys Lys Cys  
   50                  55          60  
 Gln Met Leu Leu Gln Leu Asn Ala Tyr Leu Glu Leu Arg Glu Glu Ala  
   65                  70          75          80  
 Ile Ile Leu Leu Lys Arg Gly Phe Asn Cys Tyr Asp Glu Leu Met Ile  
                   85          90          95  
 Tyr Tyr Ile Lys Ser Leu Asn Gly Leu Gly Gln Phe Asn Glu Ala Val  
           100                  105          110  
 Glu Val Ile Asn Gln Ile Ile Asp Glu Val Lys Asn His Lys Thr Arg  
           115                  120          125  
 Met Glu Leu Phe Pro Leu Lys Glu Tyr Ala Ile Ser Arg Leu Asp Glu  
   130                  135          140  
 Asp Arg Lys Ala Leu Ser Ser Ser Leu Ser Asp Phe Gly Ser Leu Asn  
   145                  150          155          160  
 Thr Arg Glu Gln Thr Ser Leu Ile Leu Gln Leu Ile Asp Asn Gly His  
                   165          170          175  
 Tyr Asn Phe Lys Glu Ser Val Ala Asn Ile Leu Ile Ser Met Asp Leu  
           180                  185          190  
 Pro Lys Asn Leu Val Ser Leu Met Leu Glu Tyr Leu Arg Phe Ala Glu  
           195                  200          205  
 Tyr Ser His Thr Ile Thr Ile His Lys Tyr Gly Glu Thr Ile Asn Val  
   210                  215          220  
 Asn Pro Asn His Leu Ser Gly Ile Glu His Thr Thr Ile Lys Asp Lys  
   225                  230          235          240  
 Val Ile Pro Val Val Met Asn Arg Leu Glu Asp Gly Ala Leu His Ile  
                   245          250          255  
 Leu Lys Glu Ala Gln His Ile Met Asn Asn His Ser Ile Leu Met Tyr  
           260                  265          270  
 Pro Ile Asp Ile Glu Ser Leu Tyr Thr Ile Asp Asn Trp Ile Asp Ala

275                      280                      285  
 Tyr Asp Val Tyr Phe Lys Gln Leu Ile Gly Ile Asp Ile Asn Gly Cys  
 290                      295                      300  
 Asn Asn Asp Thr Leu Gln Phe Ile Lys Ser Leu Asp Asn Glu Met  
 305                      310                      315

<210> 5891  
 <211> 448  
 <212> PRT  
 <213> S.epidermidis

<400> 5891  
 Met His Phe Val Ala Ile Ser Ile Asn His Arg Thr Ala Asp Val Thr  
 1                      5                      10                      15  
 Leu Arg Glu Gln Val Ala Phe Arg Asp Asp Ala Leu Arg Leu Ala His  
 20                      25                      30  
 Glu Asp Leu Tyr Glu Thr Lys Ala Ile Leu Glu Asn Val Ile Leu Ser  
 35                      40                      45  
 Thr Cys Asn Arg Thr Glu Val Tyr Ala Ile Val Asp Gln Val His Thr  
 50                      55                      60  
 Gly Arg Tyr Tyr Ile Gln Arg Phe Leu Ala Arg Ser Phe Gly Phe Glu  
 65                      70                      75                      80  
 Val Asp Asp Ile Lys Asp Met Ser Glu Val Lys Val Gly Asp Asp Ala  
 85                      90                      95  
 Val Glu His Leu Leu Arg Val Thr Ser Gly Leu Asp Ser Ile Val Leu  
 100                      105                      110  
 Gly Glu Thr Gln Ile Leu Gly Gln Met Arg Asp Ala Phe Phe Leu Ala  
 115                      120                      125  
 Gln Asn Thr Gly Thr Thr Gly Thr Ile Phe Asn His Leu Phe Lys Gln  
 130                      135                      140  
 Ala Ile Thr Phe Ala Lys Lys Ala His Ser Glu Thr Asp Ile Ala Asp  
 145                      150                      155                      160  
 Asn Ala Val Ser Val Ser Tyr Ala Ala Val Glu Leu Ala Lys Lys Val  
 165                      170                      175  
 Phe Gly Lys Leu Lys Ser Lys His Ala Val Val Ile Gly Ala Gly Glu  
 180                      185                      190  
 Met Gly Glu Leu Ser Leu Leu Asn Leu Leu Gly Ser Gly Ile Ser Asn  
 195                      200                      205  
 Val Thr Ile Val Asn Arg Thr Leu Ser Lys Ala Lys Ile Leu Ala Glu  
 210                      215                      220  
 Lys His Asn Val Ser Tyr Asp Ser Leu Ser Ala Leu Pro Ser Leu Leu  
 225                      230                      235                      240  
 Glu Thr Thr Asp Ile Val Ile Ser Ser Thr Ser Ala Glu Asp Tyr Ile  
 245                      250                      255  
 Ile Thr Asn Ser Met Val Lys Thr Ile Ser Glu Thr Arg Lys Leu Asp  
 260                      265                      270  
 Ser Leu Val Leu Ile Asp Ile Ala Val Pro Arg Asp Ile Glu Pro Gly  
 275                      280                      285  
 Ile Asp Ala Ile Thr Asn Ile Phe Asn Tyr Asp Val Asp Asp Leu Lys  
 290                      295                      300  
 Asp Leu Val Asp Ala Asn Leu Arg Glu Arg Gln Leu Ala Ala Glu Thr  
 305                      310                      315                      320  
 Ile Ala Gly Gln Ile Pro Glu Glu Ile Asp Ser His Asn Glu Trp Val  
 325                      330                      335  
 Asn Met Leu Gly Val Val Pro Val Ile Arg Ala Leu Arg Glu Lys Ala  
 340                      345                      350



Met Asn Ile Gln Ala Glu Thr Met Glu Ser Ile Asp Arg Lys Leu Pro  
                   355                  360                  365  
 Asp Leu Ser Glu Arg Glu Arg Lys Val Ile Ser Lys His Thr Lys Ser  
                   370                  375                  380  
 Ile Ile Asn Gln Met Leu Lys Asp Pro Ile Lys Gln Ala Lys Glu Leu  
 385                  390                  395                  400  
 Ser Thr Asp Lys Lys Ser Asn Glu Lys Leu Glu Leu Phe Gln Asn Ile  
                   405                  410                  415  
 Phe Asp Ile Glu Ala Glu Asp Pro Arg Glu Lys Ala Lys Leu Glu Lys  
                   420                  425                  430  
 Glu Ser Arg Ala Lys Glu Ile Leu Ala His Arg Ile Phe Ser Phe Glu  
                   435                  440                  445

<210> 5892

<211> 72

<212> PRT

<213> S.epidermidis

<400> 5892

Thr Asp Glu Val Thr Thr Asn Asp Lys Asn Ile Asn Gly Ile Lys Gly  
 1                  5                  10                  15  
 Lys Tyr Leu Ile Ser Leu Lys Glu Lys Ile Phe Lys Ile Met Ala Lys  
                   20                  25                  30  
 Ile Pro Pro Met Ile Asn Val Asn Thr Thr Ile Lys Lys Lys Lys Phe  
                   35                  40                  45  
 Asn Gly Asn Ile Ser Pro Asn Ile Leu Lys Ser Asn Met Ser Pro Tyr  
                   50                  55                  60  
 Pro Ile Asn Leu Asp Ala Asn Arg  
 65                  70

<210> 5893

<211> 78

<212> PRT

<213> S.epidermidis

<400> 5893

Arg Ile Leu Val Lys Arg Pro Ile Gly Asn Glu Ser Cys Leu Gly Met  
 1                  5                  10                  15  
 Lys Thr His Arg Gly Ala Ala Lys Arg Val Lys Arg Thr Gly Ser Gly  
                   20                  25                  30  
 Gln Leu Lys Arg Ser Arg Ala Phe Thr Ser His Leu Phe Ala Asn Lys  
                   35                  40                  45  
 Asn Thr Lys Gln Lys Arg Gln Leu Arg Lys Ala Lys Leu Val Ser Lys  
                   50                  55                  60  
 Ser Asp Met Lys Arg Val Lys Gln Leu Leu Ala Tyr Lys Lys  
 65                  70                  75

<210> 5894

<211> 54

<212> PRT

<213> S.epidermidis

<400> 5894

Lys Ser Arg Val Lys Thr Trp Ala Tyr Met Asn Arg Leu Thr Pro Trp  
 1                  5                  10                  15  
 Val Cys Ala Lys Arg Asp Val Arg Pro Ile Pro Lys Lys Arg Gly Ile

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<210> 5895
<211> 237
<212> PRT
<213> S.epidermidis
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<210> 5896
<211> 98
<212> PRT
<213> S.epidermidis
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<400> 5896

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Lys | Ile | Phe | Leu | Ser | Ala | Ala | Thr | Ser | Lys | Val | Ser | Arg | Leu | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Ile | Gly | Thr | Arg | Pro | Ile | Asn | Ser | Gly | Ile | Lys | Pro | Tyr | Asp | Trp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Arg | Ser | Ser | Gly | Arg | Ile | Cys | Ser | Ser | Lys | Ala | Ser | Ser | Ser | Tyr | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser | Ala | Ser | Leu | Leu | Ala | Asn | Pro | Ile | Thr | Phe | Ser | Pro | Lys | Arg | Leu |



&lt;400&gt; 5898

Phe Tyr Thr Ser Pro Lys Gly Pro Pro Ala Ala Ile Ser Ile Lys Ile  
 1 5 10 15  
 Ala Lys Tyr Asp Asn Ser Phe Leu Gln Val Glu Asn Tyr Phe Asn Phe  
 20 25 30  
 Leu Tyr Ser Val Lys Asp Met Asn Leu Ser Ser Ser Phe Phe Val Gly  
 35 40 45  
 Phe Leu Ser  
 50

&lt;210&gt; 5899

&lt;211&gt; 167

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5899

Glu Ala Phe Leu Met Asp Trp Ile Leu Pro Ile Ala Gly Ile Ile Ala  
 1 5 10 15  
 Ala Ile Ala Phe Leu Ile Leu Cys Ile Gly Ile Val Val Val Leu Ile  
 20 25 30  
 Ser Val Lys Lys Asn Leu Asp Tyr Val Ala Lys Thr Leu Asp Gly Val  
 35 40 45  
 Glu Gly Gln Val Gln Gly Ile Thr Arg Glu Thr Thr Asp Leu Leu His  
 50 55 60  
 Lys Val Asn Arg Leu Thr Glu Asp Ile Gln Gly Lys Val Asp Arg Leu  
 65 70 75 80  
 Asn Ser Val Val Asp Ala Val Lys Gly Ile Gly Asp Ser Val Gln Asn  
 85 90 95  
 Leu Asn Gly Ser Val Asp Arg Val Thr Asn Ser Ile Thr His Asn Ile  
 100 105 110  
 Ser Gln Asn Glu Asp Lys Ile Ser Gln Val Val Gln Trp Ser Asn Val  
 115 120 125  
 Ala Met Glu Ile Ala Asp Lys Trp Gln Asn Arg Tyr Asn Arg Arg Gly  
 130 135 140  
 Ser Ala Asn Tyr Lys Thr Asn Thr Val Ala Asp Asp Ala Asn His Ser  
 145 150 155 160  
 Tyr Asn Ser Arg Val Asn Lys  
 165

&lt;210&gt; 5900

&lt;211&gt; 78

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5900

Ala Asn Leu Ser Leu Leu Ile Glu Tyr Asn Ile Leu Val Glu Ala Tyr  
 1 5 10 15  
 Ile Pro Glu Leu Pro Ala Asp Asn Thr Leu Val Asn Ile Thr Ala Phe  
 20 25 30  
 Ile Asn Glu Ala Ala Lys Ala Asn Pro Ala Phe Leu Asn Thr Asn Val  
 35 40 45  
 Lys Gly Glu Val Ala Ile Leu Ser Pro Pro Pro Ile Asn Ala Leu Leu  
 50 55 60  
 Ser Tyr Gly Ile Asn Ile Pro Ile Met Lys Ile Ala Arg Met  
 65 70 75

<210> 5901  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

<400> 5901  
 Phe Cys Leu Ser Lys Leu Thr Glu Asn Gly Phe Thr Val Glu Leu Gly  
 1 5 10 15  
 Thr Phe Pro Leu Thr Asn Glu Thr Ser Val Glu Leu Ser Thr Tyr Ser  
 20 25 30  
 Lys Phe Ser Gly Ser Val Thr Leu  
 35 40

<210> 5902  
 <211> 366  
 <212> PRT  
 <213> S.epidermidis

<400> 5902  
 Gly Val Arg Phe Tyr Met Thr Ile Asp Asn Ser Lys Thr Leu Glu Arg  
 1 5 10 15  
 Ile Lys Ile Leu Thr Glu Leu His Gly Ala Pro Gly Phe Glu Asp Glu  
 20 25 30  
 Val Arg Ser Tyr Met Lys Ser Glu Met Glu Pro Tyr Val Asp Lys Phe  
 35 40 45  
 Ile Gln Asn Lys Met Gly Gly Phe Tyr Gly Ile Lys Lys Ser Asn Lys  
 50 55 60  
 Glu Asn Ala Pro Arg Val Met Ile Ala Ala His Met Asp Glu Ile Gly  
 65 70 75 80  
 Phe Met Ile Thr His Ile Asn Asp Asn Gly Met Ile Gln Phe Thr Asn  
 85 90 95  
 Leu Gly Gly Val Ala Asn Asp Ile Trp Gln Gly Gln Arg Leu Lys Ile  
 100 105 110  
 Lys Asn Arg Tyr Gly Lys Glu Ile Ile Gly Val Val Ala Asn Ile Pro  
 115 120 125  
 Lys His Phe Arg Thr Gly Asn Glu Ser Ile Pro Gln Ile Lys Asp Leu  
 130 135 140  
 Met Leu Asp Ile Gly Ala Ser Ser Ser Glu Glu Val Arg Asn Arg Gly  
 145 150 155 160  
 Val Glu Val Gly Asp Thr Ile Val Pro His Thr Ile Met Thr Gln Leu  
 165 170 175  
 Ser Lys Asn Arg Tyr Ser Ala Lys Ala Trp Asp Asn Arg Tyr Gly Cys  
 180 185 190  
 Val Leu Ala Ile Glu Ile Leu Glu Leu Leu Lys Asp Val Gln Leu Asp  
 195 200 205  
 Val Asp Leu Tyr Val Gly Ala Asn Val Gln Glu Glu Val Gly Leu Arg  
 210 215 220  
 Gly Ala Lys Ala Ala Ala Lys Gln Ile Asp Pro Asp Ile Ala Phe Val  
 225 230 235 240  
 Val Asp Cys Ser Pro Ala Asn Asp Ile Lys Gly Lys Gln Gln Leu Ser  
 245 250 255  
 Gly Val Leu Gly Glu Gly Thr Leu Ile Arg Ile Lys Asp Gly Thr Met  
 260 265 270  
 Ile Leu Lys Pro Leu Phe Arg Asp Tyr Leu Leu Lys Leu Ala Glu Glu  
 275 280 285  
 Asn Gln Ile Ala Tyr Gln Tyr Tyr Ile Ser Pro Gly Gly Thr Asp Gly

|   |   |     |  |     |
|---|---|-----|--|-----|
| 290   |   | 295 |  | 300 |
| Gly Glu Ile His Lys   | Glu Asn Glu Gly Ile Pro Thr Ala Val Ile Gly |     |  |     |
| 305   | 310   | 315 |  | 320 |
| Val Cys Ala Arg Tyr   | Ile His Ser Thr Asp Ala Val Phe Asp Ile Arg |     |  |     |
|   | 325   | 330 |  | 335 |
| Asp Tyr Phe Ser Ala Arg His Leu Leu Lys Glu Ser Ile Ile His Leu |   |     |  |     |
|   | 340   | 345 |  | 350 |
| Thr Ser Gly Gln Ile Gln Gln Leu Gln Tyr Gly Lys Glu Phe         |   |     |  |     |
|   | 355   | 360 |  | 365 |

<210> 5903  
 <211> 45  
 <212> PRT  
 <213> S.epidermidis

|   |
|---|
| <400> 5903  |
| Ile Gln Ile Ser Ser Trp Leu Asn Ile Arg Lys Val Thr Ala Gln Arg |
| 1 5 10 15   |
| Ala Glu Asn His Gln Lys Asn Tyr Lys Lys Asp Asn Ser Tyr Ile Ile |
| 20 25 30  |
| Ser Ile Glu Ile Val Phe Ile Tyr Leu Ser Trp Thr Phe             |
| 35 40 45  |

<210> 5904  
 <211> 54  
 <212> PRT  
 <213> S.epidermidis

|   |
|---|
| <400> 5904  |
| Ile Gln Thr Ser Ser Trp Leu Asn Ile Arg Lys Val Thr Ala Gln Arg |
| 1 5 10 15   |
| Ala Glu Asn Asn Gln Lys Asn Tyr Arg Lys Arg Gln Phe Leu Tyr Tyr |
| 20 25 30  |
| Phe Asn Arg Asn Cys Leu Phe Leu Leu Ile Leu Asn Leu Phe Val Pro |
| 35 40 45  |
| Ala Ser Leu Phe Phe Asn   |
| 50  |

<210> 5905  
 <211> 47  
 <212> PRT  
 <213> S.epidermidis

|   |
|---|
| <400> 5905  |
| Ser Phe Thr Phe Leu Ser Phe Phe Phe Leu Arg Glu Asp Met Ile Ala |
| 1 5 10 15   |
| Lys Pro Asp Ile Lys Val Thr Pro Ala Asn Gly Ser Asp Leu Ser Ala |
| 20 25 30  |
| Phe Pro Ala Ser Gly Arg Asp Leu Ile Val Leu Phe Ser Glu Leu     |
| 35 40 45  |

<210> 5906  
 <211> 51  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 5906

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Ile Ser Met Ser Gln Phe Lys Lys Ser Gly Leu Asp Lys Ser Ser Ala
1          5          10          15
Thr Val Ile Ala Glu Thr Ser Lys His Arg Ser Ser Leu Lys Asn Thr
          20          25          30
Pro Ser Thr Ser Asn Asn Ile Ala Phe Met Pro Tyr Pro Phe His Phe
          35          40          45
Arg Lys Phe
          50

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&lt;210&gt; 5907

&lt;211&gt; 46

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5907

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Phe Phe Thr Phe Phe Leu Leu Trp Phe Ala Ile Lys Lys Ser Ile Lys
1          5          10          15
Asn Lys Thr Ala Thr Ser Ile Ala Thr Ile Lys Pro Ile Thr Val Gly
          20          25          30
Glu Glu Lys Ser Ile Lys Thr Thr Leu Leu Tyr Gln Phe Gln
          35          40          45

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&lt;210&gt; 5908

&lt;211&gt; 208

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5908

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Lys Ser Thr Phe Lys Ile Trp Tyr Thr Ile Ser Asn Phe Arg Arg Tyr
1          5          10          15
Leu Met His Phe Asn Lys Tyr Gln Ile Leu Thr Thr Asp Lys Tyr Thr
          20          25          30
Lys Phe Glu His Leu Tyr Lys Lys Val Lys His Ile Cys Val Val Ile
          35          40          45
Phe Leu Val Val Phe Leu Ile Gly Phe Ile Ile Leu Leu Ser Leu Val
          50          55          60
Leu Tyr Phe Gln Gln Leu Thr Lys Asp Ala Ser Ser Ile Ser Asp Arg
          65          70          75          80
Glu Leu Lys Ala Lys Ile Leu His Ile Pro Gly Asp Glu Leu Ile Asn
          85          90          95
His Asn Asn Gln Ile Leu Glu Glu Tyr Asp His Ser Gln Asn Thr Leu
          100          105          110
Ile Val Gly Pro Asn His Val Asn Ser Asn Ile Ile His Ala Leu Thr
          115          120          125
Ala Ser Glu Asp Thr Leu Phe Tyr Lys His Asn Gly Ile Met Pro Lys
          130          135          140
Ala Leu Leu Arg Ala Met Leu Gln Asp Ile Thr Asn Ser Asn Gln Ser
          145          150          155          160
Ser Gly Gly Ser Thr Ile Thr Gln Gln Leu Val Lys Asn Gln Val Leu
          165          170          175
Ser Asn Lys Lys Leu Ile Val Val Lys Gln Met Lys Leu Ser Trp Leu
          180          185          190
His Gly Ser Lys Ile Tyr Tyr Gln Lys Met Lys Ser Tyr Ile Arg Ile
          195          200          205

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<210> 5909  
 <211> 48  
 <212> PRT  
 <213> S.epidermidis

<400> 5909  
 Leu Leu Tyr Pro Leu Ile Phe Tyr Ile Phe Gln Ile Ala Phe Ser Lys  
 1 5 10 15  
 Glu Phe Leu Ser Ala Phe Phe Tyr Leu Trp Gln Leu Phe Ile Arg Gln  
 20 25 30  
 Asp Ala Cys Asp Ile Thr Tyr Gly His Arg His Leu Phe Val Tyr Ser  
 35 40 45

<210> 5910  
 <211> 212  
 <212> PRT  
 <213> S.epidermidis

<400> 5910  
 Met Ser Met Phe Thr Gly Ile Ile Glu Glu Ile Gly Thr Val Gln Gln  
 1 5 10 15  
 Val Arg Ser Glu Gln Ser Val Arg Thr Leu Glu Ile Lys Ala Gln Asn  
 20 25 30  
 Ile Leu Val Asp Met His Ile Gly Asp Ser Ile Ser Val Asn Gly Ala  
 35 40 45  
 Cys Leu Thr Val Ile Asp Phe Thr Asp Ser Ser Phe Ser Val Gln Val  
 50 55 60  
 Ile Lys Gly Thr Glu Asn Lys Thr Tyr Leu Gly Ser Val Gln Arg Asn  
 65 70 75 80  
 Thr Glu Val Asn Leu Glu Arg Ala Met Ser Gly Ser Gly Arg Phe Gly  
 85 90 95  
 Gly His Phe Val Leu Gly His Val Asp Glu Leu Gly Thr Ile Ser Lys  
 100 105 110  
 Ile Asn Glu Thr Ala Asn Ser Lys Ile Ile Ser Ile Lys Thr Thr Lys  
 115 120 125  
 Asn Ile Leu Asn Gln Met Val Lys Gln Gly Ser Ile Thr Val Asp Gly  
 130 135 140  
 Val Ser Leu Thr Val Phe Asp Leu His Asp Tyr Thr Phe Asp Ile His  
 145 150 155 160  
 Leu Ile Pro Glu Thr Arg Arg Ser Thr Ile Leu Ser Ser Lys Lys Val  
 165 170 175  
 Gly Asp Lys Val His Leu Glu Ser Asp Val Leu Phe Lys Tyr Val Glu  
 180 185 190  
 Asn Ile Met Asn Gln Asn Gln Ser Gln Leu Thr Glu Glu Lys Leu Arg  
 195 200 205  
 Ala Phe Gly Phe  
 210

<210> 5911  
 <211> 567  
 <212> PRT  
 <213> S.epidermidis

<400> 5911  
 Ser Leu Met Leu Lys Phe His Leu Arg Leu Leu Leu Leu Ile Ser Thr  
 1 5 10 15



|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Thr | Ile | Ile | Ser | Phe | Ile | Gly | Leu | Gly | Ala | Ile | Ile | His | Asn | Thr |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Ile | Tyr | Gln | Thr | Leu | Thr | Ser | Asn | Gln | Ile | Lys | Ser | Leu | Asp | Ser | Glu |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Ala | Arg | Asn | Tyr | Val | Asn | Leu | Phe | Asn | Asn | Asn | Lys | Glu | Lys | Glu | Ile |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Thr | Asn | Ile | Ala | His | Asn | Glu | Lys | Asn | Ile | Ile | Leu | Ile | Lys | Glu | Lys |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Asp | Lys | Asp | Lys | Ile | Ile | Tyr | Ser | Ser | Gly | Asn | Ile | Lys | Asp | Ile | Asp |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| His | Arg | Ile | Asp | Asn | Glu | Ala | Asn | Pro | Ser | Lys | Leu | Ile | Asn | Lys | Asn |
|     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Thr | Lys | Leu | Gly | Met | Arg | Tyr | Thr | Tyr | Lys | Asn | Thr | Ile | Asp | Asp | Lys |
|     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Thr | Ile | Tyr | Ile | Ser | Gly | Ile | Asn | Asn | Glu | Ile | Ile | Asp | Leu | Gln | Lys |
|     | 130 |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |     |
| Asp | Leu | Trp | Lys | Tyr | Leu | Ser | Ile | Val | Gly | Val | Ile | Val | Leu | Phe | Thr |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Val | Tyr | Leu | Ala | Ser | Arg | Ser | Ile | Asn | Arg | Thr | Tyr | Ile | Arg | Pro | Ile |
|     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |     |
| Asn | Glu | Val | Thr | Tyr | Ala | Thr | Ser | Leu | Leu | Ala | Asp | Gly | Tyr | Tyr | His |
|     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |     |     |
| Val | Arg | Val | Pro | Glu | Ser | Asn | Val | Lys | Glu | Thr | Arg | Ala | Leu | Phe | Val |
|     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     |
| Thr | Thr | Asn | Asp | Leu | Ala | Arg | Arg | Leu | Gln | Lys | Leu | Asn | Asn | Ser | Gln |
|     | 210 |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |     |
| Lys | Ile | Gln | Ser | Asn | Arg | Leu | Lys | Thr | Thr | Leu | Glu | Asn | Ile | Pro | Ser |
| 225 |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |     |
| Ser | Val | Leu | Met | Ile | Asp | Lys | His | Gly | Glu | Ile | Val | Val | Ala | Asn | His |
|     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |     |
| Ala | Tyr | Tyr | Gln | Val | Phe | Asn | Pro | Asp | Gln | Met | Val | Glu | Asn | Lys | Ser |
|     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |     |
| Tyr | Ile | Gly | Phe | Ile | Asp | Asp | Ser | Ile | Glu | Lys | Leu | Ile | Ile | Glu | Ser |
|     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |     |
| Phe | Arg | Thr | Glu | Lys | Val | Ile | Tyr | Glu | Gln | Leu | Glu | Val | Ala | Ile | Asn |
|     | 290 |     |     |     | 295 |     |     |     |     |     | 300 |     |     |     |     |
| Asn | Val | His | Thr | Lys | Tyr | Phe | Asp | Val | Ser | Cys | Ile | Pro | Ile | Leu | Thr |
| 305 |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |     |
| Lys | Ser | Lys | Lys | Asn | Leu | Gln | Gly | Met | Val | Val | Val | Leu | His | Asp | Ile |
|     |     |     | 325 |     |     |     | 330 |     |     |     |     | 335 |     |     |     |
| Thr | Asn | Leu | Gln | Lys | Leu | Glu | Asn | Leu | Arg | Arg | Glu | Phe | Val | Ala | Asn |
|     |     | 340 |     |     |     | 345 |     |     |     |     | 350 |     |     |     |     |
| Val | Ser | His | Glu | Leu | Lys | Thr | Pro | Ile | Thr | Ser | Ile | Lys | Gly | Phe | Ala |
|     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |     |
| Glu | Thr | Leu | Ile | Glu | Gly | Ala | Lys | Asn | Asp | Glu | Gln | Ser | Leu | Asp | Met |
|     | 370 |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |     |
| Phe | Leu | Asn | Ile | Ile | Leu | Lys | Glu | Ser | Asn | Arg | Ile | Glu | Ser | Leu | Val |
| 385 |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |     |
| Thr | Asp | Leu | Leu | Asp | Leu | Ser | His | Ile | Glu | Gln | Gln | Lys | Glu | Leu | Glu |
|     |     |     | 405 |     |     |     |     | 410 |     |     |     | 415 |     |     |     |
| Ile | Asn | Tyr | Met | Asn | Leu | Ser | Glu | Leu | Ala | Ile | Asn | Ile | Ile | Asp | Asn |
|     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |     |
| Leu | Gln | Thr | Gln | Ala | Tyr | Asn | Lys | Arg | Ile | Lys | Ile | Gln | Ser | Glu | Ile |
|     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |     |
| Glu | Lys | Asp | Val | Ile | Ile | Glu | Ala | His | Glu | Asn | Lys | Ile | Ala | Gln | Val |
|     | 450 |     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |

Ile Thr Asn Leu Leu Ser Asn Ala Ile Asn Tyr Ser Ser Glu Asp Asn  
 465 470 475 480  
 Lys Val Ile Val Arg Val Tyr Arg Asn Asp Asn Lys Val Tyr Leu Glu  
 485 490 495  
 Ile Gln Asp Tyr Gly Ile Gly Ile Ser Glu Thr Asp Gln Lys Arg Ile  
 500 505 510  
 Phe Glu Arg Phe Tyr Arg Val Asp Lys Ala Arg Ser Arg Asp Ser Gly  
 515 520 525  
 Gly Thr Gly Leu Gly Leu Ser Ile Thr Lys His Ile Val Glu Ala His  
 530 535 540  
 Asn Gly Arg Ile Asp Val Lys Ser Ala Pro Gly Lys Gly Ser Ile Phe  
 545 550 555 560  
 Lys Val Leu Phe Asn Asp Asn  
 565

<210> 5912

<211> 102

<212> PRT

<213> S.epidermidis

<400> 5912

Ser Thr Ala Leu Asp Leu Glu Lys Met Ile Pro Thr Thr Lys Ile Thr  
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 Val Asn Arg Ala Asn Ile Ile Pro Lys Ile Arg Phe Ala Val Lys Lys  
 20 25 30  
 Glu Lys Ile Glu Ser Ala Ala Asp Arg Ile Val Lys Thr Ile Asn Pro  
 35 40 45  
 Ile Leu Lys Asn Phe Cys Leu Phe Phe Cys Val Cys Ser Ser Ser  
 50 55 60  
 Lys Val Ser Phe Asn Phe Ser Tyr Lys Phe Ser Phe Ser Cys Asn Ser  
 65 70 75 80  
 Lys Thr Cys Cys Val Tyr Ser Phe Phe Phe Ser Lys Val Ser Ser Gly  
 85 90 95  
 Thr Ser Ser Phe Ser Thr  
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<210> 5913

<211> 246

<212> PRT

<213> S.epidermidis

<400> 5913

Pro Phe Thr Phe Arg Arg Arg Asn Asp Met Thr Lys Leu Asn Val Lys  
 1 5 10 15  
 Val Phe Ala Asp Gly Ala Asp Ile Glu Glu Met Lys Ser Ala Tyr Lys  
 20 25 30  
 Asn Gln Leu Val Asp Gly Phe Thr Asn Pro Ser Leu Met Ala Lys  
 35 40 45  
 Ala Gly Val Thr Asp Tyr Lys Ala Phe Ala Glu Glu Val Val Ser Glu  
 50 55 60  
 Ile Pro Asp Ala Ser Ile Ser Phe Glu Val Phe Ala Asp Asp Leu Pro  
 65 70 75 80  
 Thr Met Glu Lys Glu Ala Glu Ile Leu Lys Gln Tyr Gly Asp Asn Val  
 85 90 95  
 Phe Val Lys Ile Pro Ile Val Thr Thr Thr Gly Glu Ser Thr Leu Pro  
 100 105 110

Leu Ile Lys Arg Leu Ser Ser Lys Gln Val Arg Leu Asn Val Thr Ala  
           115                  120          125  
 Val Tyr Thr Ile Glu Gln Val Lys Ala Ile Thr Asp Ala Val Thr Glu  
           130                  135          140  
 Gly Val Pro Thr Tyr Val Ser Val Phe Ala Gly Arg Ile Ala Asp Thr  
 145                  150          155          160  
 Gly Val Asp Pro Leu Pro Leu Met Lys Glu Ser Val Lys Val Thr His  
                   165          170          175  
 Ser Lys Glu Gly Val Gln Leu Leu Trp Ala Ser Cys Arg Glu Val Tyr  
           180          185          190  
 Asn Val Ile Gln Ala Asp Glu Ile Gly Ala Asp Ile Ile Thr Cys Pro  
           195          200          205  
 Ala Asp Val Val Lys Lys Val Asn Asn Asn Leu Gly Arg Asp Ile Gly  
           210          215          220  
 Glu Leu Ser Val Asp Thr Val Lys Gly Phe Ala Lys Asp Ile Gln Ser  
 225                  230          235          240  
 Ser Gly Leu Ser Ile Leu  
                   245

<210> 5914  
 <211> 58  
 <212> PRT  
 <213> S.epidermidis

<400> 5914  
 Val Ser Leu Pro Tyr Ile Tyr Ser Val Asn Leu Thr Tyr Tyr Ile Leu  
 1          5          10          15  
 Leu Ile Lys Val Ser Leu Tyr Tyr Tyr Asn Ser Ser Asn Ile Ser Ser  
           20          25          30  
 Thr Ala Phe Leu Pro Cys Cys Met Gln Ser Gly Lys Pro Thr Ala Ser  
           35          40          45  
 Asn Gly Ala Pro Val Thr Arg Asn Leu Gly  
           50          55

<210> 5915  
 <211> 82  
 <212> PRT  
 <213> S.epidermidis

<400> 5915  
 Asn Asn Thr Pro Ile Ala Ile Lys Ile Thr Thr Asn Ile Ala Asn Met  
 1          5          10          15  
 Ile Asn Asn Thr Ile Tyr Phe Ser Ser Tyr Phe Ile Ile Leu His Tyr  
           20          25          30  
 Asn Val Ile Leu Cys Val Val Lys Ser Gln Asn Gln Leu Ile Asp Arg  
           35          40          45  
 Leu Phe Leu Lys Asp Tyr Thr Lys Leu Lys Ile Val Val Thr Arg Tyr  
           50          55          60  
 Asp Asp Asp Lys Glu Tyr Ser Asn Lys Leu Gln Thr Asp Ile Lys Thr  
 65                  70          75          80  
 Thr Cys

<210> 5916  
 <211> 46  
 <212> PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5916

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Ile Lys Lys Pro Val Asn Glu Phe Leu Lys Thr His Leu Leu Thr Phe
1          5          10          15
Leu Leu Gly Ile Met Ser Gln Pro His Phe Thr Ile Asp Leu Leu Thr
          20          25          30
Val Lys Phe Lys Arg Val Arg Ser Asn Ser Phe Ile Leu Ile
          35          40          45

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&lt;210&gt; 5917

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5917

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Ser Arg Gln Leu Glu Ser Gly Trp Glu Lys Glu Val Glu Leu Ser Thr
1          5          10          15
Tyr Thr Asn Ser Cys Ser Tyr Asp Lys Arg Ile Val Tyr Leu Cys Ala
          20          25          30
Ile Leu Ser Met Leu Ile Gly Leu Phe Lys Asp Ile Asp Ile Ser Leu
          35          40          45
Cys Leu Gln Tyr Arg Tyr Lys Val Phe Leu Arg
          50          55

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&lt;210&gt; 5918

&lt;211&gt; 420

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5918

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Met Ile Phe Thr Ser Met Ser His Lys Val Val Val Leu Met Asn Asn
1          5          10          15
Glu Ala Leu Thr Leu Phe Arg Lys Arg Gln Gln Ala Ile Arg Lys Glu
          20          25          30
Lys Asn Tyr Tyr Asn Lys Phe Ile Phe Asn Gly His Phe Thr Val Phe
          35          40          45
Leu Leu Ile Leu Leu Gly Ala Phe Ile Phe Gly Tyr Gly Glu Trp Leu
          50          55          60
Ser His Ile Pro Pro Gln Ile Asp Tyr Ala Leu Phe Ala Ser Ile Ala
          65          70          75          80
Leu Ala Val Val Ser Leu Phe Pro Ile Arg Thr Leu Leu Lys Glu Ala
          85          90          95
Asp Gln Ile Phe Leu Leu Pro Phe Glu Arg His Met Lys Asn Tyr Ile
          100          105          110
Asn Ala Ser Leu Phe Tyr Ser Tyr Ile Ser Arg Ile Ser Leu Pro Phe
          115          120          125
Ile Leu Leu Ile Val Phe Phe Pro Leu Phe Tyr Lys Leu Ser His Asn
          130          135          140
His Tyr Gly Phe Tyr Ile Ala Phe Ser Ile Ser Thr Leu Leu Tyr Pro
          145          150          155          160
Tyr Leu Val Leu Leu Ile Lys Trp Gln Trp Val Lys Leu Asn Lys Asn
          165          170          175
Val Phe Ile Ile Asn Ile Leu Leu Phe Ile Pro Leu Ala Val Thr His
          180          185          190
Tyr Met Ile Leu Arg Phe His Asn Tyr Leu Ala Phe Leu Ile Met Ile

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Ala Leu Lys Ala Tyr Arg Asn Ile  
165

<210> 5920

<211> 382

<212> PRT

<213> S.epidermidis

<400> 5920

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | His | Val | Thr | Ile | Arg | Leu | Glu | Val | Asp | Asn | Met | Lys | Ile | Gly | Ile | 1   | 5   | 10  | 15  |
| Pro | Lys | Glu | Ile | Lys | Asn | Asn | Glu | Asn | Arg | Val | Gly | Leu | Ser | Pro | Ser | 20  | 25  | 30  |     |
| Gly | Val | His | Ala | Leu | Val | Asp | Gln | Gly | His | Glu | Val | Leu | Val | Glu | Thr | 35  | 40  | 45  |     |
| Asn | Ala | Gly | Leu | Gly | Ser | Tyr | Phe | Glu | Asp | Gly | Asp | Tyr | Gln | Glu | Ala | 50  | 55  | 60  |     |
| Gly | Ala | Lys | Ile | Val | Asp | Glu | Gln | Ser | Lys | Ala | Trp | Asp | Val | Asp | Met | 65  | 70  | 75  | 80  |
| Val | Ile | Lys | Val | Lys | Glu | Pro | Leu | Glu | Ser | Glu | Tyr | Lys | Phe | Phe | Lys | 85  | 90  | 95  |     |
| Glu | Glu | Leu | Ile | Leu | Phe | Thr | Tyr | Leu | His | Leu | Ala | Asn | Glu | Gln | Lys | 100 | 105 | 110 |     |
| Leu | Thr | Gln | Ala | Leu | Val | Asp | Asn | Lys | Val | Ile | Ser | Ile | Ala | Tyr | Glu | 115 | 120 | 125 |     |
| Thr | Val | Gln | Leu | Pro | Asp | Gly | Ser | Leu | Pro | Leu | Leu | Thr | Pro | Met | Ser | 130 | 135 | 140 |     |
| Glu | Val | Ala | Gly | Arg | Met | Ser | Thr | Gln | Val | Gly | Ala | Glu | Phe | Leu | Gln | 145 | 150 | 155 | 160 |
| Arg | Phe | Asn | Gly | Gly | Met | Gly | Ile | Leu | Leu | Gly | Gly | Ile | Pro | Gly | Val | 165 | 170 | 175 |     |
| Pro | Lys | Gly | Lys | Val | Thr | Ile | Ile | Gly | Gly | Gly | Gln | Ala | Gly | Thr | Asn | 180 | 185 | 190 |     |
| Ala | Ala | Lys | Ile | Ala | Leu | Gly | Leu | Gly | Ala | Glu | Val | Thr | Ile | Leu | Asp | 195 | 200 | 205 |     |
| Val | Asn | Pro | Lys | Arg | Leu | Glu | Glu | Leu | Glu | Asp | Leu | Phe | Asp | Gly | Arg | 210 | 215 | 220 |     |
| Val | Arg | Thr | Ile | Met | Ser | Asn | Pro | Leu | Asn | Ile | Glu | Met | Tyr | Val | Lys | 225 | 230 | 235 | 240 |
| Glu | Ser | Asp | Leu | Val | Ile | Gly | Ala | Val | Leu | Ile | Pro | Gly | Ala | Lys | Ala | 245 | 250 | 255 |     |
| Pro | Asn | Leu | Val | Thr | Glu | Asp | Met | Ile | Lys | Glu | Met | Lys | Asp | Gly | Ser | 260 | 265 | 270 |     |
| Val | Ile | Val | Asp | Ile | Ala | Ile | Asp | Gln | Gly | Gly | Ile | Phe | Glu | Thr | Thr | 275 | 280 | 285 |     |
| Asp | Lys | Ile | Thr | Thr | His | Asp | Asn | Pro | Thr | Tyr | Thr | Lys | His | Gly | Val | 290 | 295 | 300 |     |
| Val | His | Tyr | Ala | Val | Ala | Asn | Met | Pro | Gly | Ala | Val | Pro | Arg | Thr | Ser | 305 | 310 | 315 | 320 |
| Thr | Ile | Gly | Leu | Asn | Asn | Ala | Thr | Leu | Pro | Tyr | Ala | Gln | Leu | Leu | Ala | 325 | 330 | 335 |     |
| Asn | Lys | Gly | Tyr | Arg | Glu | Ala | Phe | Lys | Val | Asn | His | Pro | Leu | Ser | Leu | 340 | 345 | 350 |     |
| Gly | Leu | Asn | Thr | Phe | Asn | Gly | His | Val | Thr | Asn | Lys | Asn | Val | Ala | Asp | 355 | 360 | 365 |     |
| Thr | Phe | Asn | Phe | Glu | Tyr | Thr | Ser | Ile | Glu | Asp | Ala | Leu | Lys |     |     |     |     |     |     |

370

375

380

&lt;210&gt; 5921

&lt;211&gt; 507

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5921

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Val | Thr | Thr | Asn | Asn | Lys | Tyr | Ile | Arg | Met | Ile | Tyr | Met | Arg | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Ile | Ile | Gly | Met | Gly | Thr | Ala | Gly | Val | Ser | Val | Leu | Arg | Gln | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Lys | His | Glu | Asn | Phe | Ser | Gln | Leu | Lys | Val | Asp | Val | Tyr | Asp | Asp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asp | Arg | Asn | Met | Gly | Gln | Gly | Val | Pro | Phe | Gln | Asn | Asp | Ser | Ser | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Leu | Ile | Asn | Met | Pro | Ser | Lys | Ser | Met | Ser | Leu | Asn | Leu | Asp | Asp |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Asp | Gln | Glu | Phe | Trp | Lys | Trp | Tyr | Gln | Asn | Gln | Thr | Glu | Phe | Asn | Phe |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Asn | Pro | Gln | Tyr | Leu | Pro | Arg | Phe | Val | Phe | Gly | His | Tyr | Met | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ser | Tyr | Leu | Ser | Tyr | Tyr | Asn | Asp | Gln | Phe | Asp | Asn | Leu | Thr | Ile | Ile |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asn | Asp | Lys | Val | Gln | Glu | Ile | Phe | Thr | Gln | Ser | Asp | Val | Asp | Asp | Thr |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asp | Leu | Lys | Tyr | His | Val | Cys | Thr | Cys | Asp | Asp | Glu | Lys | Glu | Trp | Arg |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Glu | Tyr | Asp | Tyr | Leu | Phe | Leu | Thr | Phe | Gly | Thr | Phe | Ser | Tyr | His | Asp |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Pro | Tyr | Asp | Leu | Lys | Gly | Thr | Lys | Gly | Tyr | Ile | Gln | Thr | Pro | Tyr | Pro |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Thr | Tyr | His | Thr | Leu | Asp | Asn | Val | Lys | Asp | Ser | Asp | Arg | Ile | Val | Ile |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ile | Gly | Thr | Gly | Leu | Ala | Ser | Leu | Asp | Ala | Val | Arg | Tyr | Val | Ala | Ala |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| His | His | Pro | Ser | Leu | Pro | Ile | Thr | Met | Thr | Ser | Arg | Ser | Ala | Ala | Leu |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |
| Pro | Ser | Val | Arg | Gly | Lys | Met | Thr | Lys | Ile | Gln | Phe | Thr | His | Leu | Thr |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Lys | Ser | Arg | Phe | Asn | Gly | Ile | Met | Lys | Asn | His | Phe | Gly | Asn | Val | Pro |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Leu | Glu | Lys | Val | Val | Ser | Leu | Phe | Leu | Lys | Glu | Cys | Glu | Asp | Tyr | Gly |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Ile | Asp | Phe | Lys | Lys | Leu | Ile | Tyr | Arg | Arg | Thr | Gly | Asn | His | Val | Lys |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Asp | Leu | Glu | Tyr | Asp | Leu | Asn | His | Glu | Glu | Glu | Met | Gly | Ile | Phe | Gln |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     | 320 |     |
| Ser | Ile | Ile | Glu | His | Leu | Lys | Glu | Asn | Leu | Asn | Trp | Ile | Trp | Asn | Ser |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Leu | Ser | Val | Lys | Asp | Gln | Glu | Thr | Phe | Asn | Arg | Lys | Tyr | Thr | Lys | Ile |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Ile | Gln | Leu | Asn | Ser | Asn | Pro | Met | Pro | Pro | Arg | Thr | Ala | Arg | Leu | Leu |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Ile | Lys | Leu | Ile | Gln | Asn | Asn | Glu | Leu | Val | Ile | Lys | Lys | Gly | Leu | Glu |
|     | 370 |     |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |

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Asp Ile Val His Lys Asn Asn Gln Phe Met Leu Lys Tyr Asn Asp Thr  
 385 390 395 400  
 Thr Gln Asn Tyr Glu Leu Phe Asp Ile Val Ile Asn Ala Thr Gly Ser  
 405 410 415  
 Lys Thr His Leu Ser Gln Leu Asp Glu Asp Asp Gln Leu Ile Leu Asn  
 420 425 430  
 Leu Glu Asn Arg Gln Ile Val Gln Arg His Pro Met Gly Gly Ile Gln  
 435 440 445  
 Ile Ile Pro Glu Thr Asn Gln Val Ile Ser Pro Arg Tyr Gly Thr Leu  
 450 455 460  
 Lys Asn Val Ile Ala Ile Gly Gln Met Thr Asn Gly Val Asn Lys Leu  
 465 470 475 480  
 Arg Asn Gly Val Lys Met Ile Val Asn Gln Val Val Asp Thr Val Ser  
 485 490 495  
 Gln Leu Tyr Ile Thr Gln Glu Asn Arg Asn Lys  
 500 505

<210> 5922

<211> 61

<212> PRT

<213> S.epidermidis

<400> 5922

Lys Arg His Thr Lys Ala Ser Val Gln Lys Leu Asn Asn Cys Phe Ser  
 1 5 10 15  
 Gln Ala Phe Lys Asp Ala Leu Asn Glu Glu Ile Ile Glu Arg Asp Gln  
 20 25 30  
 Thr Trp Asn Asp Pro Ile Tyr Glu Arg Lys Pro Thr Lys Lys Glu Glu  
 35 40 45  
 Asp Lys Phe Met Ser Leu Thr Glu Tyr Arg Lys Leu Lys  
 50 55 60

<210> 5923

<211> 61

<212> PRT

<213> S.epidermidis

<400> 5923

Ile Asn Ser Thr Ile His Leu Arg Ser Thr Met Thr Lys Ser Ala Asn  
 1 5 10 15  
 Lys Ile Ile Ser Ile Ala Ile Lys Asp Met Lys His Ile Gln Asn Val  
 20 25 30  
 Leu Asn Arg Leu Leu Gln Ile Ser Ala Lys Ile Lys Asn Ile Pro Phe  
 35 40 45  
 Ser Lys Met Val Lys Ile Leu Ile Ser Thr Ser Thr Lys  
 50 55 60

<210> 5924

<211> 220

<212> PRT

<213> S.epidermidis

<400> 5924

Ala Cys Asn Thr Leu Phe Cys Phe Phe Ile Thr Thr Lys Lys Lys Lys  
 1 5 10 15  
 Glu Glu Ser His Met Ala Arg Phe Arg Gly Ser Asn Trp Lys Lys Ser





&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5927

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Lys | Leu | Thr | Arg | Cys | Leu | Met | Tyr | Lys | Asp | Tyr | Asn | Met | Thr | Gln |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |
| His | Thr | Leu | Leu | Met | Glu | Thr | Ser | Ala | Leu | Ile | Pro | Ala | Asn | Asp | Ile |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Ser | Arg | His | Val | Asn | Asp | Ile | Ala | Glu | Thr | Ile | Pro | Asp | Thr | Glu | Phe |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Asp | Glu | Phe | Arg | His | Tyr | Arg | Cys | Leu | Ile |     |     |     |     |     |     |
|     | 50  |     |     |     | 55  |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 5928

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5928

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Lys | Leu | Thr | Arg | Cys | Leu | Met | Tyr | Lys | Asp | Tyr | Asn | Met | Thr | Gln |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |
| His | Thr | Leu | Leu | Met | Glu | Thr | Ser | Val | Leu | Ile | Pro | Thr | Asn | Asp | Ile |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Ser | Arg | His | Val | Asn | Asp | Ile | Ala | Glu | Thr | Ile | Pro | Asp | Thr | Glu | Phe |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Arg | Tyr | His | Arg | Gly | Leu | Ile |     |     |     |     |     |     |     |     |     |
|     | 50  |     |     |     | 55  |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 5929

&lt;211&gt; 207

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5929

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Phe | Glu | Thr | Ile | Thr | Thr | Ala | Ala | Ile | Leu | Tyr | Ile | Ala | Thr | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Val | Asp | Leu | Leu | Val | Ile | Leu | Leu | Ile | Phe | Phe | Ala | Arg | Ala | Asn | Asn |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Tyr | Gln | Gln | Tyr | Lys | Asp | Ile | Tyr | Ile | Gly | Gln | Tyr | Leu | Gly | Ser | Leu |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Thr | Leu | Ile | Phe | Val | Ser | Leu | Phe | Phe | Ala | Tyr | Val | Leu | Asn | Tyr | Val |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Pro | Asp | Lys | Trp | Ile | Leu | Gly | Leu | Leu | Gly | Leu | Ile | Pro | Ile | Tyr | Leu |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |     |
| Gly | Ile | Lys | Val | Ala | Ile | Phe | Asp | Asp | Cys | Glu | Gly | Glu | Arg | Arg | Ala |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Lys | Asp | Glu | Leu | Asn | Lys | Lys | Gly | Leu | Ser | Glu | Leu | Ser | Lys | Ser | Val |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Ala | Val | Val | Thr | Leu | Ala | Ser | Cys | Gly | Ala | Asp | Asn | Ile | Gly | Leu | Phe |
|     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Val | Pro | Tyr | Phe | Thr | Thr | Ile | Asn | Asn | Tyr | Glu | Leu | Val | Ile | Thr | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ile | Thr | Phe | Val | Ile | Leu | Ile | Phe | Ile | Leu | Val | Phe | Thr | Ala | Gln | Lys |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Leu | Ala | Asn | Ile | Pro | Gly | Leu | Gly | Glu | Val | Ile | Glu | Arg | Phe | Ser | Arg |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |

Trp Ile Met Ser Ile Val Tyr Ile Gly Leu Gly Leu Phe Ile Ile Ile  
                   180                  185                  190  
 Glu Asn Gly Thr Val Gln Lys Leu Phe His Phe Val Phe Leu Val  
                   195                  200                  205

<210> 5930  
 <211> 51  
 <212> PRT  
 <213> S.epidermidis

<400> 5930  
 Ile Cys Glu Thr Leu Ser Ile Asn Thr Ile Tyr Leu Pro Phe Ser Leu  
 1                  5                  10                  15  
 Glu Leu Phe Tyr Pro Asp Thr Arg Asn Cys Asn Asn Thr His Phe Leu  
                   20                  25                  30  
 Lys His Ile Leu His Leu Asn Ile Phe Ser Ile Lys Ile Lys Glu Tyr  
                   35                  40                  45  
 Ile Arg Phe  
                   50

<210> 5931  
 <211> 76  
 <212> PRT  
 <213> S.epidermidis

<400> 5931  
 Lys Gly Gly Thr Phe Met Asp Tyr Ala His Leu Asn Leu Glu His Phe  
 1                  5                  10                  15  
 Phe Ala Arg Asn Asp Asp Leu Asp Ile Ile Arg Asp Arg Ser Asp Phe  
                   20                  25                  30  
 Val Met Ile Asn Asn Phe Thr Asn Glu Met Lys Tyr Arg Glu Gly Glu  
                   35                  40                  45  
 Ile Glu Gly Thr Ile Asp Leu Asn Gln Tyr Tyr Tyr Lys Asn Arg Ser  
                   50                  55                  60  
 Gln Ala Val Ser Phe Ile Met Met Asn Tyr Lys Asn  
 65                  70                  75

<210> 5932  
 <211> 160  
 <212> PRT  
 <213> S.epidermidis

<400> 5932  
 Arg Gly Met Thr Met Thr Lys Asn Ile Pro Thr Asn Tyr Lys Leu Ile  
 1                  5                  10                  15  
 Ser Lys Gln Leu Ala Ser Leu Ile Glu Asp Glu Lys Asn Leu Ile Ala  
                   20                  25                  30  
 Ile Leu Ser Asn Thr Ser Ala Leu Asn Asp Thr Ile Asp Gln Ile  
                   35                  40                  45  
 Asn Trp Val Gly Phe Tyr Leu Ile Glu Asn Asn Glu Leu Ile Leu Gly  
                   50                  55                  60  
 Pro Phe Gln Gly His Pro Ala Cys Val His Ile Ala Ile Gly Lys Gly  
 65                  70                  75                  80  
 Val Cys Gly Thr Ala Val Ser Ser Gly Glu Thr Gln Arg Val Lys Asp  
                   85                  90                  95  
 Val His Gln Phe Pro Gly His Ile Ala Cys Asp Ala Asn Ser Gln Ser





Leu Ala Gln Ile Glu Lys Asp Ile Lys Thr His Val Ile Tyr Pro Thr  
 225 230 235 240  
 Val Asp Lys Ala Leu Leu Asp Asp Glu Thr Lys Phe Tyr Ile Asn Pro  
 245 250 255  
 Thr Gly Arg Phe Val Ile Gly Gly Pro Gln Gly Asp Ala Gly Leu Thr  
 260 265 270  
 Gly Arg Lys Ile Ile Val Asp Thr Tyr Gly Gly Tyr Ala Arg His Gly  
 275 280 285  
 Gly Gly Cys Phe Ser Gly Lys Asp Pro Thr Lys Val Asp Arg Ser Ala  
 290 295 300  
 Ala Tyr Ala Ala Arg Tyr Val Ala Lys Asn Ile Val Ala Ala Gly Leu  
 305 310 315 320  
 Ala Lys Gln Cys Glu Val Gln Leu Ala Tyr Ala Ile Gly Val Ala Glu  
 325 330 335  
 Pro Val Ser Ile Ser Ile Asn Thr Phe Asp Thr Gly Lys Val Ser Glu  
 340 345 350  
 Ala Arg Leu Val Glu Ala Val Arg Lys His Phe Asp Leu Arg Pro Ala  
 355 360 365  
 Gly Ile Ile Lys Met Leu Asp Leu Lys Gln Pro Ile Tyr Arg Gln Thr  
 370 375 380  
 Ala Ala Tyr Gly His Phe Gly Arg Thr Asp Val Leu Leu Pro Trp Glu  
 385 390 395 400  
 Lys Leu Asp Lys Val Asn Val Leu Lys Asp Ala Val Glu Ile Gln  
 405 410 415

&lt;210&gt; 5936

&lt;211&gt; 173

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5936

Arg Ser Ala Ala Arg Asn Glu Lys Arg Phe Ala Asn Glu Glu Arg Thr  
 1 5 10 15  
 Lys Met Thr Asn His Ile Val Leu Tyr Gln Pro Glu Ile Pro Ala Asn  
 20 25 30  
 Thr Gly Asn Ile Ala Arg Thr Cys Ala Gly Thr Leu Thr His Leu His  
 35 40 45  
 Leu Ile Lys Pro Leu Gly Phe Ser Thr Glu Asp Lys Met Leu Lys Arg  
 50 55 60  
 Ala Gly Leu Asp Tyr Trp Glu His Val Asn Ile Thr Tyr His Asp Ser  
 65 70 75 80  
 Ile Glu Glu Phe Phe Ala Asn Thr Glu Gly His Tyr Tyr Leu Leu Thr  
 85 90 95  
 Lys Phe Gly Lys Gln Thr Tyr Ser Asp Phe Asn Phe Ser Asn Thr Asn  
 100 105 110  
 Glu Asp Tyr Tyr Phe Ile Phe Gly Lys Glu Thr Thr Gly Leu Pro Glu  
 115 120 125  
 Trp Val Lys Glu Lys Tyr Ala Lys Thr Ala Leu Arg Ile Pro Met Ser  
 130 135 140  
 Asp Asn Ile Arg Ser Leu Asn Leu Ser Asn Thr Ala Ala Leu Leu Ile  
 145 150 155 160  
 Tyr Glu Ala Leu Arg Gln Gln Asp Tyr Pro Asn Leu Ser  
 165 170

&lt;210&gt; 5937

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5937

```

Asn Glu Gln Ala Glu Tyr Thr Ile Met Lys Leu Glu Arg Ile Leu Pro
1      5      10      15
Phe Ser Lys Ser Leu Ile Asp Ser His Ile Asn His Asn Ser Ile Val
      20      25      30
Ile Asp Ala Thr Cys Gly Asn Gly Asn Asp Thr Ala Tyr Phe Ala Gln
      35      40      45
His Val Pro Asn Gly Phe Val Tyr Gly Phe Asp Ile Gln Glu Gln Ala
      50      55      60
Ile Leu Asn Thr His Lys Lys Thr Lys Asp Tyr Ser Asn Val Lys Leu
65      70      75      80
Ile Gln Ser Gly His Glu Asn Ala Lys Leu His Ile Pro Ala Gln His
      85      90      95
His Gly Cys Ile Asp Ala Ala Ile Phe Asn Leu Gly Tyr Leu Pro Lys
      100      105      110
Gly Asn Lys Glu Ile Val Thr Lys Pro Glu Thr Thr Ile Met Ala Ile
      115      120      125
Asn Glu Ile Phe Asp Ile Leu Ser Ile Glu Gly Ile Ile Ile Leu Val
      130      135      140
Ile Tyr His Gly His Glu Glu Gly Lys Val Glu Lys Glu Ala Leu Leu
145      150      155      160
Glu Phe Leu Gln Asn Phe Asp Gln Asn Lys Ala His Ile Leu Gln Tyr
      165      170      175
Gln Phe Ile Asn Gln Lys Asn Asn Ala Pro Phe Ile Cys Ala Ile Asp
      180      185      190
Lys Arg Asn
      195

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&lt;210&gt; 5938

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5938

```

Ala Met Tyr Leu Tyr Thr Ser Tyr Gly Thr Tyr Gln Phe Leu Asn Gln
1      5      10      15
Ile Lys Leu Asn His Gln Glu Arg Asn Leu Phe Gln Phe Ser Thr Asn
      20      25      30
Asp Ser Ser Ile Ile Leu Glu Glu Ser Glu Gly Lys Ser Ile Leu Lys
      35      40      45
His Pro Ser Ala Tyr Gln Val Ile Asp Ser Thr Gly Glu Phe Ser Glu
      50      55      60
His His Phe Tyr Ser Ala Ile Phe Val Pro Thr Ser Glu Asp His Arg
65      70      75      80
Gln Gln Leu Glu Lys Lys Leu Leu His Val Asp Val Pro Leu Ser Asn
      85      90      95
Phe Gly Gly Phe Lys Ser Tyr Arg Leu Leu Lys Pro Thr Glu Gly Ser
      100      105      110
Thr Tyr Lys Ile Tyr Phe Gly Phe Ala Asn Arg Thr Ala Tyr Glu Asp
      115      120      125
Phe Lys Ala Ser Asp Ile Phe Asn Glu Asn Phe Ser Lys Asp Ala Leu
      130      135      140
Ser Gln Tyr Phe Gly Ala Ser Gly Gln His Ser Ser Tyr Phe Glu Arg

```

```
<210> 5939
<211> 55
<212> PRT
<213> S.epidermidis
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```
<210> 5940
<211> 375
<212> PRT
<213> S.epidermidis
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|            |         |         |         |         |     |         |         |         |         |         |         |         |         |         |         |
|------------|---------|---------|---------|---------|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| <400> 5940 |         |         |         |         |     |         |         |         |         |         |         |         |         |         |         |
| Gly 1      | Met     | Lys     | Ala     | Ile 5   | Leu | Phe     | Asp     | Val     | Asp 10  | Gly     | Val     | Phe     | Leu     | Ser 15  | Glu     |
| Glu        | Arg     | Cys     | Phe 20  | Asp     | Val | Ser     | Ala     | Ile 25  | Thr     | Val     | Ala     | Glu     | Leu 30  | Leu     | Ser     |
| Ser        | Pro     | Asp 35  | Phe     | Leu     | Asn | Cys     | Asp 40  | Ile     | Asp     | Ile     | His     | Phe     | Asp 45  | Gly     | Asn     |
| Leu        | Thr 50  | Glu     | Asn     | Asp     | Ile | Asn 55  | Lys     | Ile     | Arg     | Arg     | Asn 60  | Val     | Phe     | Asn     | Asn     |
| Asp 65     | Arg     | Ile     | Leu     | Asn 70  | Gln | Leu     | Lys     | Ser     | Leu     | Gly 75  | Leu     | Asn     | Ser     | Asn     | Trp 80  |
| Asp        | Met     | Leu     | Phe 85  | Ile     | Val | Phe     | Ser     | Ile     | His 90  | Leu     | Ile     | Asp     | Lys     | Ala 95  | Lys     |
| Gln        | Leu     | Lys     | Pro 100 | Ser     | Leu | Arg     | Asp     | Gln 105 | Leu     | Leu     | Asp     | Glu     | Leu 110 | Leu     | Phe     |
| Thr        | Lys     | Glu 115 | Thr     | Leu     | Lys | Glu     | Ile 120 | Ala     | Lys     | Asp     | Leu     | Thr 125 | Asp     | Lys     | Thr     |
| Ile        | Asn 130 | Tyr     | Ser     | Leu     | Pro | Tyr 135 | Asp     | Val     | Ile     | Ala     | Ser 140 | Phe     | Arg     | Asn     | Gly     |
| Lys 145    | Asp     | Ala     | Ile     | Tyr 150 | Glu | Asp     | Leu     | Glu     | Val     | Tyr 155 | Ala     | Lys     | Asn     | Gln     | Leu 160 |
| Glu        | Leu     | Asn     | Asn 165 | Thr     | Ser | Leu     | Phe     | Lys     | Leu 170 | Lys     | Ser     | Ala     | Leu     | Trp 175 | Thr     |
| Leu        | Ala     | Lys     | Asp 180 | Ile     | Tyr | Gln     | Glu     | Trp 185 | Tyr     | Leu     | Gly     | Lys     | Ala 190 | Leu     | Phe     |
| Asn        | Gln     | Val 195 | Glu     | Tyr     | Lys | Lys     | Asp 200 | Ile     | Gln     | Asp     | Phe     | Lys 205 | Lys     | Gly     | Phe     |
| Ile        | Tyr 210 | Asp     | Glu     | Val     | Ile | Leu 215 | Lys     | Pro     | Ile     | Glu     | Glu 220 | Ile     | Gln     | Leu     | Leu     |
| Leu 225    | Gln     | Asn     | Leu     | Ile 230 | Glu | Ala     | Gly     | Tyr     | Gln     | Ile 235 | Ala     | Ile     | Ala     | Thr     | Gly 240 |
| Arg        | Pro     | Arg     | Thr     | Glu     | Thr | Ile     | Ile     | Pro     | Phe     | Gln     | Ser     | Leu     | Gly     | Leu     | Lys     |



2551

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |  |  |
| Ser | Tyr | Phe | Lys | Asp | Glu | His | Ile | Val | Thr | Ala | Ser | Glu | Val | Leu | Leu |  |  |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |  |  |
| Ala | Glu | Lys | Gln | Phe | Pro | Gln | Tyr | Gln | Pro | Leu | Gly | Lys | Pro | Asn | Pro |  |  |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |  |
| Phe | Ser | Tyr | Ile | Ala | Thr | Leu | Asn | Gly | Asn | Tyr | Asn | Asp | Gln | Tyr | Glu |  |  |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |  |  |
| Arg | Tyr | Ala | Thr | Lys | Gln | Glu | Asp | Ile | Val | Asn | Lys | Asp | Glu | Val | Tyr |  |  |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |  |  |
| Ile | Val | Gly | Asp | Ser | Leu | Ala | Asp | Leu | Leu | Ser | Ala | Lys | Lys | Ile | Gly |  |  |
|     |     |     | 325 |     |     |     |     | 330 |     |     |     |     |     | 335 |     |  |  |
| Ala | Thr | Phe | Ile | Gly | Thr | Leu | Thr | Gly | Leu | Lys | Gly | Lys | Ala | Ala | His |  |  |
|     |     | 340 |     |     |     |     |     | 345 |     |     |     |     | 350 |     |     |  |  |
| Ser | Glu | Leu | Val | Ala | Asn | Gly | Ala | Asp | His | Val | Val | Glu | Asp | Ile | Thr |  |  |
|     |     | 355 |     |     |     | 360 |     |     |     |     |     | 365 |     |     |     |  |  |
| Lys | Ile | Arg | Lys | Ile | Leu | Leu |     |     |     |     |     |     |     |     |     |  |  |
|     | 370 |     |     |     | 375 |     |     |     |     |     |     |     |     |     |     |  |  |

<210> 5941

<211> 47

<212> PRT

<213> S.epidermidis

<400> 5941

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Lys | Cys | Asn | Phe | Tyr | Tyr | Asn | Ile | Lys | Lys | Arg | Ala | Lys | Ser | Leu | Thr |  |  |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |  |  |
| Ile | Arg | Leu | Ile | Ala | Ile | Gln | Asn | Tyr | Ser | Thr | Thr | Glu | Pro | Ile | Phe |  |  |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |  |  |
| Leu | Asn | Phe | Ser | Lys | Arg | Ser | Phe | Ala | Asn | Ser | Ser | Gly | Val | Ser |     |  |  |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |  |  |

<210> 5942

<211> 3696

<212> PRT

<213> S.epidermidis

<400> 5942

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Glu | Ala | Asn | Leu | Met | Asn | Leu | Phe | Arg | Lys | Gln | Lys | Phe | Ser | Ile | Arg |  |  |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |  |  |
| Lys | Phe | Asn | Ile | Gly | Ile | Phe | Ser | Ala | Leu | Ile | Ala | Thr | Val | Ala | Phe |  |  |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |  |  |
| Leu | Ala | His | Pro | Gly | Gln | Ala | Thr | Ala | Ser | Glu | Leu | Glu | Pro | Ser | Gln |  |  |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |  |  |
| Asn | Asn | Asp | Thr | Thr | Ala | Gln | Ser | Asp | Gly | Gly | Leu | Glu | Asn | Thr | Ser |  |  |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |  |  |
| Gln | Ser | Asn | Pro | Ile | Ser | Glu | Glu | Thr | Thr | Asn | Thr | Leu | Ser | Gly | Gln |  |  |
| 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |     |  |  |
| Thr | Val | Pro | Ser | Ser | Thr | Glu | Asn | Lys | Gln | Thr | Gln | Asn | Val | Pro | Asn |  |  |
|     |     |     | 85  |     |     |     | 90  |     |     |     |     | 95  |     |     |     |  |  |
| His | Asn | Ala | Gln | Pro | Ile | Ala | Ile | Asn | Thr | Glu | Glu | Ala | Glu | Ser | Ala |  |  |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |  |  |
| Gln | Thr | Ala | Ser | Tyr | Thr | Asn | Ile | Asn | Glu | Asn | Asn | Asp | Thr | Ser | Asp |  |  |
|     |     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |  |  |
| Asp | Gly | Leu | His | Val | Asn | Gln | Pro | Ala | Lys | His | His | Ile | Glu | Ala | Gln |  |  |
|     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |     |  |  |
| Ser | Glu | Asp | Val | Thr | Asn | His | Thr | Asn | Ser | Asn | His | Ser | Asn | Ser | Ser |  |  |

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145 150 155 160  
 Ile Pro Glu Asn Lys Ala Thr Thr Glu Ser Ser Ser Lys Pro Lys Lys  
 165 170 175  
 Arg Gly Lys Arg Ser Leu Asp Thr Asn Ser Gly Asn Asp Thr Thr Ser  
 180 185 190  
 Thr Thr Gln Asn Thr Asp Pro Asn Leu Ser Asn Thr Gly Pro Asn Gly  
 195 200 205  
 Ile Asn Thr Val Ile Thr Phe Asp Asp Leu Gly Ile Lys Thr Ser Thr  
 210 215 220  
 Asn Arg Ser Arg Pro Glu Val Lys Val Val Asp Ser Leu Asn Gly Phe  
 225 230 235 240  
 Thr Met Val Asn Gly Lys Val Gly Leu Leu Asn Ser Val Leu Glu  
 245 250 255  
 Arg Thr Ser Val Phe Asp Ser Ala Asp Pro Lys Asn Tyr Gln Ala Ile  
 260 265 270  
 Asp Asn Val Val Ala Leu Gly Arg Ile Lys Gly Asn Asp Pro Asn Asp  
 275 280 285  
 His Asp Gly Phe Asn Gly Ile Glu Lys Glu Phe Ser Val Asn Pro Asn  
 290 295 300  
 Ser Glu Ile Ile Phe Ser Phe Asn Thr Met Thr Ala Lys Asn Arg Lys  
 305 310 315 320  
 Gly Gly Thr Gln Leu Val Leu Arg Asn Ala Glu Asn Asn Gln Glu Ile  
 325 330 335  
 Ala Ser Thr Asp Ile Gln Gly Gly Gly Val Tyr Arg Leu Phe Lys Leu  
 340 345 350  
 Pro Asp Asn Val His Arg Leu Lys Val Gln Phe Leu Pro Met Asn Glu  
 355 360 365  
 Ile His Ser Asp Phe Lys Arg Ile Gln Gln Leu His Asp Gly Tyr Arg  
 370 375 380  
 Tyr Tyr Ser Phe Ile Asp Thr Ile Gly Val Asn Ser Gly Ser His Leu  
 385 390 395 400  
 Tyr Val Lys Ser Arg Gln Val Asn Lys Asn Val Lys Asn Gly Lys Glu  
 405 410 415  
 Phe Glu Val Asn Thr Arg Ile Glu Asn Asn Gly Asn Phe Ala Ala Ala  
 420 425 430  
 Ile Gly Gln Asn Glu Leu Thr Tyr Lys Val Thr Leu Pro Glu Asn Phe  
 435 440 445  
 Glu Tyr Val Asp Asn Ser Thr Glu Val Ser Phe Val Asn Gly Asn Val  
 450 455 460  
 Pro Asn Ser Thr Val Asn Pro Phe Ser Val Asn Phe Asp Arg Gln Asn  
 465 470 475 480  
 His Thr Leu Thr Phe Ser Ser Asn Gly Leu Asn Leu Gly Arg Ser Ala  
 485 490 495  
 Gln Asp Val Ala Arg Phe Leu Pro Asn Lys Ile Leu Asn Ile Arg Tyr  
 500 505 510  
 Lys Leu Arg Pro Val Asn Ile Ser Thr Pro Arg Glu Val Thr Phe Asn  
 515 520 525  
 Glu Ala Ile Lys Tyr Lys Thr Phe Ser Glu Tyr Tyr Ile Asn Thr Asn  
 530 535 540  
 Asp Asn Thr Val Thr Gly Gln Gln Thr Pro Phe Ser Ile Asn Val Ile  
 545 550 555 560  
 Met Asn Lys Asp Asp Leu Ser Glu Gln Val Asn Lys Asp Ile Ile Pro  
 565 570 575  
 Ser Asn Tyr Thr Leu Ala Ser Tyr Asn Lys Tyr Asn Lys Leu Lys Glu  
 580 585 590  
 Arg Ala Gln Thr Val Leu Asp Glu Glu Thr Asn Asn Thr Pro Phe Asn

|      |      |     |     |      |     |      |     |     |      |     |      |     |     |      |     |
|------|------|-----|-----|------|-----|------|-----|-----|------|-----|------|-----|-----|------|-----|
| 595  |      |     |     |      | 600 |      |     |     |      | 605 |      |     |     |      |     |
| Gln  | Arg  | Tyr | Ser | Gln  | Thr | Gln  | Ile | Asp | Asp  | Leu | Leu  | His | Glu | Leu  | Gln |
| 610  |      |     |     |      |     | 615  |     |     |      |     | 620  |     |     |      |     |
| Thr  | Thr  | Leu | Ile | Asn  | Arg | Val  | Ser | Ala | Ser  | Arg | Glu  | Ile | Asn | Asp  | Lys |
| 625  |      |     |     |      | 630 |      |     |     |      | 635 |      |     |     |      | 640 |
| Ala  | Gln  | Glu | Met | Thr  | Asp | Ala  | Val | Tyr | Asp  | Ser | Thr  | Glu | Leu | Thr  | Thr |
|      |      |     |     | 645  |     |      |     |     | 650  |     |      |     |     | 655  |     |
| Glu  | Glu  | Lys | Asp | Thr  | Leu | Val  | Asp | Gln | Ile  | Glu | Asn  | His | Lys | Asn  | Glu |
|      |      |     | 660 |      |     |      |     | 665 |      |     |      |     | 670 |      |     |
| Ile  | Ser  | Asn | Asn | Ile  | Asp | Asp  | Glu | Leu | Thr  | Asp | Asp  | Gly | Val | Glu  | Arg |
|      |      | 675 |     |      |     |      | 680 |     |      |     |      | 685 |     |      |     |
| Val  | Lys  | Glu | Ala | Gly  | Leu | His  | Thr | Leu | Glu  | Ser | Asp  | Thr | Pro | His  | Pro |
|      | 690  |     |     |      |     | 695  |     |     |      |     | 700  |     |     |      |     |
| Val  | Thr  | Lys | Pro | Asn  | Ala | Arg  | Gln | Val | Val  | Asn | Asn  | Arg | Ala | Asp  | Gln |
| 705  |      |     |     |      | 710 |      |     |     |      | 715 |      |     |     |      | 720 |
| Gln  | Lys  | Thr | Leu | Ile  | Arg | Asn  | Asn | His | Glu  | Ala | Thr  | Thr | Glu | Glu  | Gln |
|      |      |     |     | 725  |     |      |     |     | 730  |     |      |     |     | 735  |     |
| Asn  | Glu  | Ala | Ile | Arg  | Gln | Val  | Glu | Ala | His  | Ser | Ser  | Asp | Ala | Ile  | Ala |
|      |      |     | 740 |      |     |      |     | 745 |      |     |      |     | 750 |      |     |
| Lys  | Ile  | Gly | Glu | Ala  | Glu | Thr  | Asp | Thr | Thr  | Val | Asn  | Glu | Ala | Arg  | Asp |
|      |      | 755 |     |      |     |      | 760 |     |      |     |      | 765 |     |      |     |
| Asn  | Gly  | Thr | Lys | Leu  | Ile | Ala  | Thr | Asp | Val  | Pro | Asn  | Pro | Thr | Lys  | Lys |
|      | 770  |     |     |      |     | 775  |     |     |      |     | 780  |     |     |      |     |
| Ala  | Glu  | Ala | Arg | Ala  | Ala | Val  | Thr | Asn | Ser  | Ala | Asn  | Ser | Lys | Ile  | Lys |
| 785  |      |     |     |      | 790 |      |     |     |      | 795 |      |     |     |      | 800 |
| Asp  | Ile  | Asn | Asn | Asn  | Thr | Gln  | Ala | Thr | Leu  | Asp | Glu  | Arg | Asn | Asp  | Ala |
|      |      |     | 805 |      |     |      |     |     | 810  |     |      |     |     | 815  |     |
| Ile  | Ala  | Leu | Val | Asn  | Arg | Ser  | Lys | Asp | Glu  | Ala | Ile  | Gln | Asn | Ile  | Asn |
|      |      |     | 820 |      |     |      |     | 825 |      |     |      |     | 830 |      |     |
| Thr  | Ala  | Gln | Gly | Asn  | Asp | Asp  | Val | Thr | Glu  | Ala | Gln  | Asn | Asn | Gly  | Thr |
|      |      | 835 |     |      |     | 840  |     |     |      |     | 845  |     |     |      |     |
| Asn  | Thr  | Ile | Gln | Gln  | Val | Pro  | Leu | Thr | Pro  | Val | Lys  | Arg | Gln | Asn  | Ala |
|      | 850  |     |     |      |     | 855  |     |     |      |     | 860  |     |     |      |     |
| Ile  | Ala  | Thr | Ile | Asn  | Ala | Lys  | Ala | Asp | Glu  | Gln | Lys  | Arg | Leu | Ile  | Gln |
| 865  |      |     |     | 870  |     |      |     |     | 875  |     |      |     |     | 880  |     |
| Ala  | Asn  | Asn | Asn | Ala  | Thr | Thr  | Glu | Glu | Lys  | Ala | Asp  | Ala | Glu | Arg  | Lys |
|      |      |     | 885 |      |     |      |     |     | 890  |     |      |     |     | 895  |     |
| Val  | Asn  | Glu | Ala | Val  | Ile | Thr  | Ala | Asn | Gln  | Asn | Ile  | Thr | Asn | Ala  | Thr |
|      |      |     | 900 |      |     |      | 905 |     |      |     |      | 910 |     |      |     |
| Thr  | Asn  | Arg | Asp | Val  | Asp | Gln  | Ala | Gln | Thr  | Thr | Gly  | Ser | Gly | Ile  | Ile |
|      |      | 915 |     |      |     | 920  |     |     |      |     | 925  |     |     |      |     |
| Ser  | Ala  | Ile | Ser | Pro  | Ala | Thr  | Lys | Ile | Lys  | Glu | Asp  | Ala | Arg | Ala  | Ala |
|      | 930  |     |     |      |     | 935  |     |     |      |     | 940  |     |     |      |     |
| Val  | Glu  | Ala | Lys | Ala  | Ile | Ala  | Gln | Asn | Gln  | Gln | Ile  | Asn | Ser | Asn  | Asn |
| 945  |      |     |     | 950  |     |      |     |     | 955  |     |      |     |     | 960  |     |
| Met  | Ala  | Thr | Thr | Glu  | Lys | Glu  | Asp | Ala | Leu  | Asn | Gln  | Val | Glu | Ala  |     |
|      |      |     | 965 |      |     |      | 970 |     |      |     |      |     | 975 |      |     |
| His  | Lys  | Gln | Ala | Ile  | Ala | Thr  | Ile | Asn | Gln  | Ala | Gln  | Ser | Thr | Gln  |     |
|      |      |     | 980 |      |     |      | 985 |     |      |     |      | 990 |     |      |     |
| Gln  | Val  | Ser | Glu | Ala  | Lys | Asn  | Asn | Gly | Ile  | Asn | Thr  | Ile | Asn | Gln  | Asp |
|      |      | 995 |     |      |     | 1000 |     |     |      |     | 1005 |     |     |      |     |
| Gln  | Pro  | Asn | Ala | Val  | Lys | Lys  | Asn | Asn | Thr  | Lys | Thr  | Ile | Leu | Glu  | Gln |
|      | 1010 |     |     |      |     | 1015 |     |     |      |     | 1020 |     |     |      |     |
| Lys  | Gly  | Asn | Glu | Lys  | Lys | Ser  | Ala | Ile | Ala  | Gln | Thr  | Pro | Asp | Ala  | Thr |
| 1025 |      |     |     | 1030 |     |      |     |     | 1035 |     |      |     |     | 1040 |     |
| Thr  | Glu  | Glu | Lys | Gln  | Glu | Ala  | Val | Ser | Ala  | Val | Ser  | Gln | Ala | Val  | Thr |



|   |      |      |
|---|------|------|
| 1490  | 1495 | 1500 |
| Glu Lys Glu Val Ala Asn Asn Leu Val Ile Ala Thr Lys Gln Lys Ser |      |      |
| 1505  | 1510 | 1515 |
| Leu Asp Asn Ile Asn Ser Leu Ser Ser Asn Asn Asp Val Glu Asn Ala |      | 1520 |
|   | 1525 | 1530 |
| Lys Val Ala Gly Ile Asn Glu Ile Ala Asn Val Leu Pro Ala Thr Ala |      | 1535 |
|   | 1540 | 1545 |
| Val Lys Ser Lys Ala Lys Lys Asp Ile Asp Gln Lys Leu Ala Gln Gln |      | 1550 |
|   | 1555 | 1560 |
| Ile Asn Gln Ile Gln Thr His Gln Thr Ala Thr Thr Glu Glu Lys Glu |      | 1565 |
|   | 1570 | 1575 |
| Ala Ala Ile Gln Leu Ala Asn Gln Lys Ser Asn Glu Ala Arg Thr Ala |      | 1580 |
| 1585  | 1590 | 1595 |
| Ile Gln Asn Glu His Ser Asn Asn Gly Val Ala Gln Ala Lys Ser Asn |      | 1600 |
|   | 1605 | 1610 |
| Gly Ile His Glu Ile Glu Leu Val Met Pro Asp Ala His Lys Lys Ser |      | 1615 |
|   | 1620 | 1625 |
| Asp Ala Lys Gln Ser Ile Asp Asn Lys Tyr Asn Glu Gln Ser Asn Thr |      | 1630 |
|   | 1635 | 1640 |
| Ile Asn Thr Thr Pro Asp Ala Thr Asp Glu Glu Lys Gln Lys Ala Leu |      | 1645 |
| 1650  | 1655 | 1660 |
| Asp Lys Leu Lys Ile Ala Lys Asp Ala Gly Tyr Asn Lys Val Asp Gln |      | 1665 |
| 1665  | 1670 | 1675 |
| Ala Gln Thr Asn Gln Gln Val Ser Asp Ala Lys Thr Glu Ala Ile Asp |      | 1680 |
|   | 1685 | 1690 |
| Thr Ile Thr Asn Ile Gln Ala Asn Val Ala Lys Lys Pro Ser Ala Arg |      | 1695 |
|   | 1700 | 1705 |
| Val Glu Leu Asp Ser Lys Phe Glu Asp Leu Lys Arg Gln Ile Asn Ala |      | 1710 |
|   | 1715 | 1720 |
| Thr Pro Asn Ala Thr Glu Glu Lys Gln Asp Ala Ile Gln Arg Leu     |      | 1725 |
| 1730  | 1735 | 1740 |
| Asn Gly Lys Arg Asp Glu Val Lys Asn Leu Ile Asn Gln Asp Arg Arg |      | 1745 |
| 1745  | 1750 | 1755 |
| Asp Asn Glu Val Glu Gln His Lys Asn Ile Gly Leu Gln Glu Leu Glu |      | 1760 |
|   | 1765 | 1770 |
| Thr Ile His Ala Asn Pro Thr Arg Lys Ser Asp Ala Leu Gln Glu Leu |      | 1775 |
|   | 1780 | 1785 |
| Gln Thr Lys Phe Ile Ser Gln Thr Glu Leu Ile Asn Asn Asn Lys Asp |      | 1790 |
|   | 1795 | 1800 |
| Ala Thr Asn Glu Glu Lys Asp Glu Ala Lys Arg Leu Leu Glu Ile Ser |      | 1805 |
| 1810  | 1815 | 1820 |
| Lys Asn Lys Thr Ile Thr Asn Ile Asn Gln Ala Gln Thr Asn Asn Gln |      | 1825 |
| 1825  | 1830 | 1835 |
| Val Asp Asn Ala Lys Asp Asn Gly Met Asn Glu Ile Ala Thr Ile Ile |      | 1840 |
|   | 1845 | 1850 |
| Pro Ala Thr Thr Ile Lys Thr Asp Ala Lys Thr Ala Ile Asp Lys Lys |      | 1855 |
|   | 1860 | 1865 |
| Ala Glu Gln Val Thr Ile Ile Asn Gly Asn Asn Asp Ala Thr Asp     |      | 1870 |
|   | 1875 | 1880 |
| Glu Glu Lys Ala Glu Ala Arg Lys Leu Val Glu Lys Ala Lys Ile Glu |      | 1885 |
| 1890  | 1895 | 1900 |
| Ala Lys Ser Asn Ile Thr Asn Ser Asp Thr Glu Arg Glu Val Asn Gly |      | 1905 |
| 1905  | 1910 | 1915 |
| Ala Lys Thr Asn Gly Leu Glu Lys Ile Asn Asn Ile Gln Pro Ser Thr |      | 1920 |
|   | 1925 | 1930 |
| Gln Thr Lys Thr Asn Ala Lys Gln Glu Ile Asn Asp Lys Ala Gln Glu |      | 1935 |



2385                      2390                      2395                      2400  
 Lys Thr Asn Ala Leu Ala Ala Leu Ala Ser Glu Ala Lys Asn Lys Asn  
                                  2405                      2410                      2415  
 Ala Ile Ile Asp Gln Thr Pro Asn Ala Thr Ala Glu Glu Lys Glu Glu  
                                  2420                      2425                      2430  
 Ala Asn Asn Lys Val Asp Arg Leu Gln Glu Glu Ala Asp Ala Asn Ile  
                                  2435                      2440                      2445  
 Leu Lys Ala His Thr Thr Asp Glu Val Asn Asn Ile Lys Asn Gln Ala  
                                  2450                      2455                      2460  
 Val Gln Asn Ile Asn Ala Val Gln Val Glu Val Ile Lys Lys Gln Asn  
 2465                      2470                      2475                      2480  
 Val Lys Asn Gln Leu Asn Gln Phe Ile Asp Asn Gln Lys Lys Ile Ile  
                                  2485                      2490                      2495  
 Glu Asn Thr Pro Asp Ala Thr Leu Glu Glu Lys Ala Glu Ala Asn Arg  
                                  2500                      2505                      2510  
 Leu Leu Gln Asn Val Leu Thr Ser Thr Ser Asp Glu Ile Ala Asn Val  
                                  2515                      2520                      2525  
 Asp His Asn Asn Glu Val Asp Gln Ala Leu Asp Lys Ala Arg Pro Lys  
                                  2530                      2535                      2540  
 Ile Glu Glu Ile Val Pro Gln Val Ser Lys Lys Arg Asp Val Leu Asn  
 2545                      2550                      2555                      2560  
 Ala Ile Gln Glu Ala Phe Asn Ser Gln Thr Gln Glu Ile Gln Glu Asn  
                                  2565                      2570                      2575  
 Gln Glu Ala Thr Asn Glu Glu Lys Thr Glu Ala Leu Asn Lys Ile Asn  
                                  2580                      2585                      2590  
 Gln Leu Leu Asn Gln Ala Lys Val Asn Ile Asp Gln Ala Gln Ser Asn  
                                  2595                      2600                      2605  
 Lys Asp Val Asp Ser Ala Lys Thr Arg Ser Ile Gln Asp Ile Glu Gln  
                                  2610                      2615                      2620  
 Ile Gln Pro His Pro Gln Thr Lys Ala Thr Gly Arg His Arg Leu Asn  
 2625                      2630                      2635                      2640  
 Glu Lys Ala Asn Gln Gln Gln Ser Thr Ile Ala Thr His Pro Asn Ser  
                                  2645                      2650                      2655  
 Thr Ile Glu Glu Arg Gln Glu Ala Ser Ala Lys Leu Gln Glu Val Leu  
                                  2660                      2665                      2670  
 Lys Lys Ala Ile Ala Lys Ile Asp Lys Gly Gln Thr Asn Asp Asp Val  
                                  2675                      2680                      2685  
 Glu Lys Thr Val Val Asn Gly Ile Ala Glu Ile Glu Asn Ile Leu Pro  
                                  2690                      2695                      2700  
 Ala Thr Thr Val Lys Asp Lys Ala Lys Ala Asp Val Asn Ala Glu Lys  
 2705                      2710                      2715                      2720  
 Glu Gln Lys Asn Leu Gln Ile Asn Ser Asn Asp Glu Ala Thr Thr Glu  
                                  2725                      2730                      2735  
 Glu Lys Leu Val Ala Ser Asp Asn Leu Asn His Val Val Glu Thr Thr  
                                  2740                      2745                      2750  
 Asn Gln Ala Ile Glu Asp Ala Pro Asp Thr Asn Gln Val Asn Val Glu  
                                  2755                      2760                      2765  
 Lys Asn Lys Gly Ile Gly Thr Ile Arg Asp Ile Gln Pro Leu Val Val  
                                  2770                      2775                      2780  
 Lys Lys Pro Thr Ala Lys Ser Lys Ile Glu Ser Ala Val Glu Lys Lys  
 2785                      2790                      2795                      2800  
 Lys Thr Glu Ile Asn Gln Thr Gln Asn Ala Thr His Asp Glu Val Arg  
                                  2805                      2810                      2815  
 Glu Gly Leu Asn Gln Leu Asn Gln Ile His Glu Lys Ala Lys Asn Asp  
                                  2820                      2825                      2830  
 Val Asn Gln Ser Gln Thr Asn Gln Gln Val Glu Asn Ala Glu Gln Asn

|      |     |     |     |     |      |     |     |     |     |      |     |     |     |     |      |  |
|------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|--|
| 2835 |     |     |     |     | 2840 |     |     |     |     | 2845 |     |     |     |     |      |  |
| Ser  | Leu | Asp | Gln | Ile | Asn  | Asn | Phe | Arg | Pro | Asp  | Phe | Ser | Lys | Lys | Arg  |  |
| 2850 |     |     |     |     | 2855 |     |     |     |     | 2860 |     |     |     |     |      |  |
| Asn  | Ala | Val | Ala | Glu | Ile  | Val | Lys | Ala | Gln | Gln  | Asn | Lys | Ile | Asp | Glu  |  |
| 2865 |     |     |     |     | 2870 |     |     |     |     | 2875 |     |     |     |     | 2880 |  |
| Ile  | Glu | Gln | Glu | Phe | Ser  | Ala | Thr | Gln | Glu | Glu  | Lys | Asp | Asn | Ala | Leu  |  |
| 2885 |     |     |     |     | 2890 |     |     |     |     | 2895 |     |     |     |     |      |  |
| Gln  | His | Leu | Asp | Glu | Gln  | Val | Lys | Glu | Ile | Ile  | Asn | Ser | Ile | Asn | Gln  |  |
| 2900 |     |     |     |     | 2905 |     |     |     |     | 2910 |     |     |     |     |      |  |
| Ala  | Asn | Thr | Asp | Asn | Glu  | Val | Asp | Asn | Ala | Lys  | Thr | Ser | Gly | Leu | Asn  |  |
| 2915 |     |     |     |     | 2920 |     |     |     |     | 2925 |     |     |     |     |      |  |
| Asn  | Ile | Thr | Glu | Tyr | Arg  | Pro | Glu | Tyr | Asn | Lys  | Lys | Lys | Asn | Ala | Ile  |  |
| 2930 |     |     |     |     | 2935 |     |     |     |     | 2940 |     |     |     |     |      |  |
| Leu  | Lys | Leu | Tyr | Asp | Val  | Ser | Asp | Thr | Gln | Glu  | Ala | Ile | Ile | Asn | Gly  |  |
| 2945 |     |     |     |     | 2950 |     |     |     |     | 2955 |     |     |     |     | 2960 |  |
| Tyr  | Pro | Asp | Ala | Thr | Glu  | Asp | Glu | Leu | Gln | Glu  | Ala | Asn | Ser | Lys | Leu  |  |
| 2965 |     |     |     |     | 2970 |     |     |     |     | 2975 |     |     |     |     |      |  |
| Asn  | Lys | Ile | Leu | Leu | Asp  | Ala | Lys | Lys | Gln | Ile  | Gly | Leu | Ala | His | Thr  |  |
| 2980 |     |     |     |     | 2985 |     |     |     |     | 2990 |     |     |     |     |      |  |
| Asn  | Asn | Glu | Val | Asp | Asp  | Ile | Tyr | Asn | Glu | Val  | Ser | Gln | Lys | Met | Lys  |  |
| 2995 |     |     |     |     | 3000 |     |     |     |     | 3005 |     |     |     |     |      |  |
| Thr  | Ile | Leu | Pro | Arg | Val  | Asp | Thr | Lys | Ala | Val  | Ala | Arg | Ser | Val | Leu  |  |
| 3010 |     |     |     |     | 3015 |     |     |     |     | 3020 |     |     |     |     |      |  |
| Asn  | Ala | Leu | Ala | Lys | Gln  | Leu | Ile | Lys | Thr | Phe  | Glu | Asn | Thr | Ala | Asp  |  |
| 3025 |     |     |     |     | 3030 |     |     |     |     | 3035 |     |     |     |     | 3040 |  |
| Val  | Thr | His | Glu | Glu | Arg  | Asn | Asp | Ala | Ile | Asn  | His | Val | Lys | Glu | Gln  |  |
| 3045 |     |     |     |     | 3050 |     |     |     |     | 3055 |     |     |     |     |      |  |
| Leu  | Ser | Leu | Val | Phe | Asn  | Ala | Ile | Glu | Lys | Asp  | Arg | Lys | Asp | Ile | Gln  |  |
| 3060 |     |     |     |     | 3065 |     |     |     |     | 3070 |     |     |     |     |      |  |
| Val  | Ala | Gln | Asp | Glu | Leu  | Phe | Gly | Leu | Asn | Glu  | Leu | Asn | Ser | Ile | Phe  |  |
| 3075 |     |     |     |     | 3080 |     |     |     |     | 3085 |     |     |     |     |      |  |
| Ile  | Asn | Ile | Thr | Gln | Lys  | Pro | Thr | Ala | Arg | Lys  | Ala | Ile | Ser | Gly | Met  |  |
| 3090 |     |     |     |     | 3095 |     |     |     |     | 3100 |     |     |     |     |      |  |
| Ala  | Ser | Gln | Leu | Asn | Asn  | Ser | Ile | Asn | Asn | Thr  | Pro | Tyr | Ala | Thr | Glu  |  |
| 3105 |     |     |     |     | 3110 |     |     |     |     | 3115 |     |     |     |     | 3120 |  |
| Glu  | Glu | Arg | Gln | Ile | Ala  | Leu | Asn | Lys | Val | Lys  | Ala | Ile | Val | Asp | Asp  |  |
| 3125 |     |     |     |     | 3130 |     |     |     |     | 3135 |     |     |     |     |      |  |
| Ala  | Asn | Glu | Lys | Ile | Arg  | Glu | Ala | Asn | Thr | Asp  | Ser | Glu | Val | Leu | Gly  |  |
| 3140 |     |     |     |     | 3145 |     |     |     |     | 3150 |     |     |     |     |      |  |
| Thr  | Lys | Thr | Asn | Ala | Ile  | Thr | Leu | Leu | Gln | Ala  | Ile | Ser | Ala | Asp | Val  |  |
| 3155 |     |     |     |     | 3160 |     |     |     |     | 3165 |     |     |     |     |      |  |
| Gln  | Val | Lys | Pro | Gln | Ala  | Phe | Glu | Glu | Ile | Asn  | Ala | Gln | Ala | Glu | Ile  |  |
| 3170 |     |     |     |     | 3175 |     |     |     |     | 3180 |     |     |     |     |      |  |
| Gln  | Arg | Glu | Arg | Ile | Asn  | Gly | Asn | Ser | Asp | Ala  | Thr | Arg | Glu | Glu | Lys  |  |
| 3185 |     |     |     |     | 3190 |     |     |     |     | 3195 |     |     |     |     | 3200 |  |
| Glu  | Glu | Ala | Leu | Lys | Gln  | Val | Asp | Thr | Leu | Val  | Asn | His | Ser | Phe | Ile  |  |
| 3205 |     |     |     |     | 3210 |     |     |     |     | 3215 |     |     |     |     |      |  |
| Thr  | Ile | Asn | Asn | Val | Asn  | Lys | Asn | Gln | Glu | Val  | Tyr | Asp | Thr | Lys | Asp  |  |
| 3220 |     |     |     |     | 3225 |     |     |     |     | 3230 |     |     |     |     |      |  |
| Lys  | Thr | Ile | Glu | Ala | Ile  | His | Lys | Ile | Lys | Pro  | Ile | Ser | Thr | Ile | Lys  |  |
| 3235 |     |     |     |     | 3240 |     |     |     |     | 3245 |     |     |     |     |      |  |
| Pro  | Gln | Ala | Leu | Asn | Glu  | Ile | Thr | Ile | Gln | Leu  | Asp | Thr | Gln | Arg | Asp  |  |
| 3250 |     |     |     |     | 3255 |     |     |     |     | 3260 |     |     |     |     |      |  |
| Leu  | Ile | Lys | Asn | Asn | Lys  | Glu | Ser | Thr | Val | Glu  | Glu | Lys | Ala | Ser | Ala  |  |
| 3265 |     |     |     |     | 3270 |     |     |     |     | 3275 |     |     |     |     | 3280 |  |
| Ile  | Asp | Lys | Leu | Ile | Lys  | Thr | Ala | Ala | Arg | Ile  | Ala | Glu | Ala | Ile | Asp  |  |



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          3285          3290          3295
Lys Ala Gln Thr Asn Glu Glu Val Lys Asn Ile Lys Lys Gln Ser Ile
          3300          3305          3310
Asp Glu Ile Ser Lys Ile Leu Pro Val Ile Glu Ile Lys Ser Ala Ala
          3315          3320          3325
Arg Asn Glu Ile His Gln Lys Ala Glu Val Ile Arg Gly Leu Ile Asn
          3330          3335          3340
Asp Asn Glu Glu Ala Thr Lys Glu Glu Lys Asp Ile Ala Leu Asn Gln
          3345          3350          3355          3360
Leu Asp Thr Thr Leu Thr Gln Ala Asn Val Ser Ile Asp Gln Ala Leu
          3365          3370          3375
Thr Asn Glu Ala Val Asn Arg Ala Lys Glu Ile Ala Asn Ser Glu Ile
          3380          3385          3390
Asn Lys Ile Ser Val Ile Ala Ile Lys Lys Pro Glu Ala Ile Ala Glu
          3395          3400          3405
Ile Gln Glu Leu Ala Asp Lys Lys Leu Asn Lys Phe Lys Gln Ser Gln
          3410          3415          3420
Glu Ala Thr Ile Glu Glu Lys Gln Ser Ala Ile Asn Glu Leu Glu Gln
          3425          3430          3435          3440
Ala Leu Lys Ser Ala Ile Asn His Ile His Gln Ser Gln Asn Asn Glu
          3445          3450          3455
Ser Val Ser Ala Ala Leu Lys Glu Ser Ile Ser Leu Ile Asp Ser Ile
          3460          3465          3470
Glu Ile Gln Ala His Lys Lys Leu Glu Ala Lys Ala Tyr Ile Asp Gly
          3475          3480          3485
Tyr Ser Asp Asp Lys Ile Asn Asp Ile Ser Ser Arg Ala Thr Asn Glu
          3490          3495          3500
Glu Lys Gln Ile Phe Val Ser Lys Leu Lys Ala Leu Ile Asn Arg Thr
          3505          3510          3515          3520
His Lys Gln Ile Asp Glu Ala Glu Thr Phe Val Ser Val Glu Thr Ile
          3525          3530          3535
Val Arg Asn Phe Lys Val Glu Ala Asp Lys Leu Asn Ser Ile Val Arg
          3540          3545          3550
Lys Lys Ala Lys Ala Ser Lys Glu Ile Glu Leu Glu Ala Asp His Val
          3555          3560          3565
Lys Gln Met Ile Asn Ala Asn Leu Ser Ala Ser Thr Arg Val Lys Gln
          3570          3575          3580
Asn Ala Arg Thr Leu Ile Asn Glu Ile Val Ser Asn Ala Leu Ser Gln
          3585          3590          3595          3600
Leu Asn Lys Val Thr Thr Asn Lys Glu Val Asp Glu Ile Val Asn Glu
          3605          3610          3615
Thr Ile Glu Lys Leu Lys Ser Ile Gln Ile Arg Glu Asp Lys Ile Leu
          3620          3625          3630
Ser Ser Gln Arg Ser Ser Thr Ser Met Thr Glu Lys Ser Asn Gln Cys
          3635          3640          3645
Tyr Ser Ser Glu Asn Asn Thr Ile Lys Ser Leu Pro Glu Ala Gly Asn
          3650          3655          3660
Ala Asp Lys Ser Leu Pro Leu Ala Gly Val Thr Leu Ile Ser Gly Leu
          3665          3670          3675          3680
Ala Ile Met Ser Ser Arg Lys Lys Lys Lys Asp Lys Lys Val Asn Asp
          3685          3690          3695

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&lt;210&gt; 5943

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5943

Leu Ile Ile Tyr Ile Lys Ser Thr Phe Met Phe Lys Ile Ile Met Lys  
 1 5 10 15  
 Val Val Phe Leu Gln Lys Ala Pro Asn Asp Phe Lys Tyr Lys Phe Ile  
 20 25 30  
 Trp Gly Glu Val Ile Val Ile Gly Phe Tyr Tyr Tyr Tyr Ile Ile Ser  
 35 40 45  
 Ile Leu Pro Gln Ser Ser Ile Ile Ser Met Ile Cys Pro Asp Thr Ala  
 50 55 60  
 Ser Ala  
 65

&lt;210&gt; 5944

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5944

Lys Lys Phe Leu Asn Asp Thr Ile Arg Met Met Trp Phe Ser Gln Ile  
 1 5 10 15  
 Leu Asn Pro Ser Tyr Lys Met Ile Asn Arg Tyr Arg Val Asn Pro Lys  
 20 25 30  
 Val Asp Val Leu Leu Glu Ser Leu Phe Ile Gln Phe His Ser Gln Cys  
 35 40 45  
 Leu Asn Gln Asn Leu Ile Asn Asp Lys Ala  
 50 55

&lt;210&gt; 5945

&lt;211&gt; 282

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5945

Arg Arg Asp Tyr Met Glu Thr Val Gln Phe Tyr Asn Gly Arg Thr Met  
 1 5 10 15  
 Pro Lys Ile Gly Leu Gly Thr Tyr Arg Val Lys Asp Gly Asp Glu Cys  
 20 25 30  
 Arg Glu Ser Val Lys Tyr Ala Ile Glu Arg Gly Tyr Arg Ser Ile Asp  
 35 40 45  
 Thr Ala Met Ile Tyr Gly Asn Glu Glu Thr Val Gly Gln Gly Ile Lys  
 50 55 60  
 Glu Gly Leu Glu Ser Thr Gly Leu Ser Arg Glu Asp Leu Phe Ile Thr  
 65 70 75 80  
 Ser Lys Leu Trp Leu Thr Asp Phe Gly Arg Gln Asn Val Glu Asp Ala  
 85 90 95  
 Tyr Arg Gln Ser Val Ala Lys Leu Gly Leu Asp Tyr Leu Asp Leu Tyr  
 100 105 110  
 Leu Met His Trp Pro Gly Thr Asn Glu Ala Val Met Ile Asp Thr Trp  
 115 120 125  
 Arg Gly Met Glu Asp Leu Tyr Lys Gln Asn Gln Val Lys Asn Ile Gly  
 130 135 140  
 Val Ser Asn Phe Thr Pro Glu His Phe Glu Ala Leu Leu Ala Gln Val  
 145 150 155 160  
 Ser Ile Lys Pro Val Ile Asn Gln Val Glu Phe His Pro Tyr Leu Thr  
 165 170 175

Gln Asn Lys Leu Arg Lys Tyr Leu Glu Ala Gln Asn Ile Ile Met Glu  
 180 185 190  
 Ser Trp Ser Pro Leu Met Asn Ser Gln Ile Leu His Asp Glu Val Ile  
 195 200 205  
 Asn Glu Val Ala Asn Glu Val Gly Lys Thr Pro Ala Gln Val Val Ile  
 210 215 220  
 Arg Trp Asn Ile Gln His Asp Val Val Val Ile Pro Lys Ser Val Thr  
 225 230 235 240  
 Pro His Arg Ile Glu Glu Asn Leu Asp Val Trp Asn Phe Glu Leu Ser  
 245 250 255  
 Asp Asn Gln Met Glu Arg Ile Asp Gln Leu Asn Gln Asp Lys Arg Ile  
 260 265 270  
 Gly Pro Asn Pro Leu Glu Phe Asp Gly Lys  
 275 280

<210> 5946

<211> 443

<212> PRT

<213> S.epidermidis

<400> 5946

Lys Asp Cys Tyr Lys Glu Ile Arg Gly Asn Gly Met Thr Lys Asn Glu  
 1 5 10 15  
 Gln Ile Ile Lys His Ile Glu Ser Leu Ser Ile Gly Ser Lys Ile Ser  
 20 25 30  
 Val Arg Lys Ile Ala Lys Asp Leu Asn Val Ser Glu Gly Thr Ala Tyr  
 35 40 45  
 Arg Ala Ile Lys Asp Ala Ser Gln Leu Gly Ile Val Ala Thr Ile Asp  
 50 55 60  
 Arg Val Gly Thr Val Arg Ile Glu Lys Arg Ser Arg Glu Asn Leu Asp  
 65 70 75 80  
 Asn Leu Thr Phe Asn Glu Ile Ala Asn Ile Val Glu Gly Gln Ile Leu  
 85 90 95  
 Ala Gly Arg Ala Gly Leu Asn Lys Ser Val Ser Lys Phe Ala Ile Gly  
 100 105 110  
 Ala Met Gln Phe Asp Asp Ile Leu Lys Tyr Ile Gly Lys His Thr Leu  
 115 120 125  
 Leu Ile Val Gly Asn Arg Glu Asn Val Gln Ile Glu Ala Leu Lys Arg  
 130 135 140  
 Glu Thr Ser Ile Leu Ile Thr Gly Gly Phe Arg Pro Ser Ala Glu Ile  
 145 150 155 160  
 Ile Arg Tyr Ala Asp Glu His Glu Leu Pro Ile Ile Ser Ser Ser Tyr  
 165 170 175  
 Asp Thr Phe Leu Val Ala Asn Ile Ile Asn Lys Ala Met Phe Asn Gln  
 180 185 190  
 Lys Ile Arg Lys Glu Ile Leu Val Val Glu Asp Ile Val Lys Pro Ile  
 195 200 205  
 Asn Glu Leu Ser Val Leu Phe Asp Ser Met Thr Ile His Asp Tyr Lys  
 210 215 220  
 Lys Ile Ala Asn Glu Thr Gly His Thr Arg Phe Pro Ile Val Asn Glu  
 225 230 235 240  
 Glu Phe Lys Leu Val Gly Ile Val Thr Ser Arg Glu Ile Ile Asn Met  
 245 250 255  
 Asn Glu Glu Asp Leu Leu Gly Lys Val Met Thr Lys Asn Pro Leu Ser  
 260 265 270  
 Val Lys Leu Thr Asn Thr Val Ala Ser Cys Ala His Leu Leu Ile Trp

275                      280                      285  
 Glu Gly Ile Glu Leu Leu Pro Val Thr Asp Asn Asn Lys Lys Ala Val  
 290                      295                      300  
 Gly Val Ile Asn Arg Gln Asp Val Leu Lys Ser Met Gln Leu Leu Gly  
 305                      310                      315                      320  
 Arg Gln Pro Gln Ile Gly Glu Thr Val Asn Asp Gln Ile Ala Lys His  
 325                      330                      335  
 Ile Ser Ile His Gln Gln Gly Ile Asn Val Asp Val Ser Pro Leu Ile  
 340                      345                      350  
 Thr Asn His Tyr Gly Thr Leu Ser Lys Ala Val Phe Val Gly Ile Ile  
 355                      360                      365  
 Glu Glu Thr Ile Arg His Glu Met Arg Lys Tyr Lys Lys Gly Asn Val  
 370                      375                      380  
 Met Ile Glu Ser Met Ser Ile Ile Tyr Ile Lys Thr Val Pro Ile Glu  
 385                      390                      395                      400  
 Ser Thr Ile Glu Val His Tyr Glu Met Leu Asp Val Gly Arg Tyr Phe  
 405                      410                      415  
 Ala Lys Leu Glu Val Thr Met Ile Asn Asn Gly Glu Lys Val Ala Asn  
 420                      425                      430  
 Ala Leu Val Ile Cys Gln Met Phe Asp Gly Phe  
 435                      440

<210> 5947  
 <211> 72  
 <212> PRT  
 <213> S.epidermidis

<400> 5947  
 Leu Ser Ile Leu Thr Ile Arg Asn Val Ser Ser Ser Leu Ser Asn Leu  
 1                      5                      10                      15  
 Asn Ser Thr Ser Lys Cys Phe Lys Arg Ala Phe Asn Leu Ser Leu Ile  
 20                      25                      30  
 Trp Lys Thr Phe Ile Ile Asn Thr Pro Tyr Phe Arg Thr Phe Leu Gln  
 35                      40                      45  
 Phe Thr Ile Asn Asn Val Glu Leu Thr Glu Lys Thr Gln Ile Ile Thr  
 50                      55                      60  
 Leu Ile Cys Tyr Tyr Lys Leu Met  
 65                      70

<210> 5948  
 <211> 386  
 <212> PRT  
 <213> S.epidermidis

<400> 5948  
 Asn Ile Phe Tyr Leu Lys Gly Val Tyr Met Met His Thr Ile Leu Leu  
 1                      5                      10                      15  
 Val Val Phe Met Ile Ile Leu Gly Ala Ile Ile Gly Gly Val Thr Asn  
 20                      25                      30  
 Met Ile Ala Ile Lys Met Leu Phe His Pro Phe Lys Pro Tyr Tyr Ile  
 35                      40                      45  
 Phe Arg Phe Arg Ile Pro Phe Thr Pro Gly Leu Ile Pro Lys Arg Arg  
 50                      55                      60  
 Glu Glu Ile Ala Arg Lys Ile Gly Gln Val Ile Glu Glu His Leu Ile  
 65                      70                      75                      80  
 Thr Glu Glu Leu Ile Arg Gln Lys Leu Asn Gln Pro Gln Ser Arg Asn



Val His Leu Asp Lys Gly Lys Asn Thr Asn Val Tyr Ser Ile Asn Tyr  
                     85                    90                    95  
 Val Phe Gly Lys Lys Leu Ala Lys Met Asn Asp Asn Leu Ala Met Ile  
                     100                    105                    110  
 Glu Leu Lys Tyr Asn Glu Ala Asn Asn Glu Val Phe Tyr Asn His Met  
                     115                    120                    125  
 Met Tyr Ser Lys Phe Val Lys Tyr Asn Asn Lys Glu Tyr Ile Asn Met  
                     130                    135                    140  
 Lys Gly Ile Leu Asn Gly Lys Pro Tyr Tyr Glu Phe Asn Ile Asp Gln  
                     145                    150                    155                    160  
 Lys Gly His Tyr Tyr Asp Lys Asn Phe Lys His Thr Ser Lys Asp Glu  
                     165                    170                    175  
 Ile Glu Lys Asp Ser Ala Lys Asn Leu Pro Pro Lys Glu Arg Gly Trp  
                     180                    185                    190  
 Cys Glu Trp Ala Val Gly Ala Leu Cys Gly Thr Gly Gly Ala Ala Gly  
                     195                    200                    205  
 Cys Trp Ala Thr Ala Thr Ala Leu Gly Ile Thr Thr Gly Trp Gly Gly  
                     210                    215                    220  
 Phe Ser Leu Ala Thr Ile Cys Gly Leu Ile Ser Ser Leu Gly Cys Thr  
                     225                    230                    235                    240  
 Gly Ala Thr Asn Tyr Ile Cys Lys  
                     245

<210> 5950  
 <211> 49  
 <212> PRT  
 <213> S.epidermidis

<400> 5950  
 Ser Ile Val Tyr Asp Trp Ser Arg Met Leu Phe Ile Tyr Leu Thr Arg  
 1                    5                    10                    15  
 Val Val Pro Arg Gln Thr Arg Pro Leu Leu Gly Thr Ser Phe Phe Met  
                     20                    25                    30  
 Leu Ser Lys Val Asn Leu Phe Asn Lys Pro Thr Ile Arg Cys Phe Ile  
                     35                    40                    45  
 Lys

<210> 5951  
 <211> 52  
 <212> PRT  
 <213> S.epidermidis

<400> 5951  
 Ile Asn Pro Leu His Phe Lys Ser Ser Ile Lys Ala Leu Ala Ile Asp  
 1                    5                    10                    15  
 Lys Ile Leu Leu Asn Tyr Phe Ile Asn Leu Lys Lys Leu Lys Ile Phe  
                     20                    25                    30  
 Asn Lys Tyr Ser Asp Ile Ser Asp Leu Phe Lys His Ile Lys Lys Arg  
                     35                    40                    45  
 Pro Tyr Lys Met  
                     50

<210> 5952  
 <211> 417  
 <212> PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5952

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Thr Ile Leu Tyr Ile Phe Ser Ile Asn Phe Ala Asp Ile Leu Arg Arg
1      5      10      15
Ile Lys Leu Met Val Lys Phe Ile His Cys Ala Asp Leu His Leu Asp
      20      25      30
Ser Pro Phe Lys Ser Lys Ser Tyr Leu Ser Pro Asn Ile Phe Glu Asp
      35      40      45
Val Gln Lys Ser Ala Tyr Glu Ser Phe Lys Asn Ile Val Asp Leu Ala
50      55      60
Leu Lys Gln Glu Val Asp Phe Ile Ile Ile Ala Gly Asp Leu Phe Asp
65      70      75      80
Ser Glu Asn Arg Thr Leu Arg Ala Glu Val Phe Leu Asn Glu Gln Phe
      85      90      95
Glu Arg Leu Arg Lys Glu Gln Ile Phe Val Tyr Ile Cys His Gly Asn
      100     105     110
His Asp Pro Leu Thr Ser Lys Ile Thr Ser Gln Trp Pro Asn Asn Val
      115     120     125
Ser Val Phe Ser Asn Gln Val Glu Thr Tyr Gln Ala Ile Thr Lys Ser
130     135     140
Gly Glu Thr Ile Tyr Ile His Gly Phe Ser Tyr Gln Asn Asp Ala Ser
145     150     155     160
Tyr Glu Asn Lys Ile Asp Ala Tyr Pro Ser Ser Gln Gly Gln Lys Gly
      165     170     175
Ile His Ile Gly Val Leu His Gly Thr Tyr Ser Lys Ser Ser Val Lys
180     185     190
Asp Arg Tyr Thr Glu Phe Arg Leu Glu Asp Leu Asn Gln Arg Leu Tyr
195     200     205
His Tyr Trp Ala Leu Gly His Ile His Gln Arg Glu Gln Leu Ser Asp
210     215     220
Met Pro Val Ile Asn Tyr Pro Gly Asn Ile Gln Gly Arg His Phe Asn
225     230     235     240
Glu Leu Gly Glu Lys Gly Cys Leu Leu Val Glu Gly Asp His Leu Lys
      245     250     255
Leu Thr Thr Gln Phe Tyr Pro Thr Gln Phe Ile Lys Phe Glu Glu Ala
260     265     270
Thr Ile Glu Thr Asp His Thr Ser Lys Gln Gly Leu Tyr Asp Val Ile
275     280     285
Gln Ser Phe Lys Asp Lys Val Arg Thr Glu Gly Lys Ser Phe Tyr Arg
290     295     300
Leu Asn Val Arg Ile Asn Ser Glu Asp Ile Ile Ala Pro Gln Asp Leu
305     310     315     320
Ile Gln Leu Lys Glu Met Ile Thr Glu Phe Glu Glu Asn Glu Asn Gln
      325     330     335
Phe Val Phe Ile Glu Asp Leu Asn Leu Gln Tyr Val Gln Asn Asp Glu
340     345     350
Met Pro Ile Val Lys Glu Phe Ser Pro Glu Leu Leu Asp Asp Ala Ser
355     360     365
Leu Phe Asp Ser Ala Met Thr Asp Leu Tyr Leu Asn Pro Arg Ala Ser
370     375     380
Lys Phe Leu Asp Asp Tyr Asn Glu Phe Asp Lys Val Glu Leu Val Asn
385     390     395     400
His Ala Glu Arg Leu Leu Lys Asp Glu Met Arg Gly Glu Gln Asn Asp
      405     410     415
Asn

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<210> 5953  
 <211> 101  
 <212> PRT  
 <213> S.epidermidis

<400> 5953

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Val | Ala | Tyr | Lys | Thr | Met | Gln | Leu | Lys | Tyr | Asn | Glu | Ile | Asn | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asn | Gln | Leu | Ile | Ser | Ser | Glu | Thr | Pro | Phe | Leu | Glu | Asn | Phe | Gln | Asp |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Cys | Ile | Lys | Ile | Asn | Lys | Lys | Asn | Lys | Ile | Ser | Gln | Ser | Thr | Leu | Asn |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Cys | Tyr | Tyr | Asn | Ala | Leu | Asn | Ile | Phe | Asp | Glu | Lys | Phe | Gly | Asn | Thr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Ile | Lys | Asn | Phe | Ser | Gln | Leu | Lys | Tyr | Ser | Glu | Met | Leu | Lys | Glu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Tyr | Ala | Glu | Gly | His | Ile | Ile | Gly | Gly | His | Lys | Lys | Asp | Ile | Arg | Lys |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gln | Val | Phe | Lys | Asn |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 100 |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 5954  
 <211> 568  
 <212> PRT  
 <213> S.epidermidis

<400> 5954

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Glu | Lys | Tyr | Met | Val | Leu | Phe | Ile | Ile | Leu | Ala | Ile | Leu | Val | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Leu | Ile | Ala | Ile | Gly | Val | Leu | Phe | Tyr | Met | Arg | Ser | Asn | Lys | Arg |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asn | Leu | Ile | Glu | Lys | Thr | Glu | Glu | Arg | Lys | Asn | Glu | Ile | Glu | Gln | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Leu | Asp | Asp | Asn | Leu | Arg | Lys | Leu | Thr | Gly | Leu | Asn | Leu | Lys | Gly |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Thr | Lys | Thr | Lys | Tyr | Asp | Ala | Met | Lys | Lys | Asp | Asn | Thr | Glu | Thr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Thr | Asn | Lys | Tyr | Leu | Ala | Pro | Val | Glu | Glu | Lys | Ile | Gln | Asn | Ala | Glu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Glu | Leu | Leu | Glu | Lys | Phe | Lys | Phe | Thr | Ala | Ala | Gln | Thr | Glu | Ile | Asp |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asp | Ala | His | Glu | Leu | Met | Asp | Gln | Tyr | Glu | Glu | Asn | Tyr | Gln | His | Gln |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Val | Thr | Gln | Val | Asp | Asp | Ile | Ile | Asn | Leu | His | Lys | Glu | Asn | Glu | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Tyr | Glu | Lys | Cys | Lys | Val | Asp | Tyr | Arg | Glu | Met | Lys | Arg | Asp | Val |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Leu | Ala | Asn | Arg | His | Gln | Phe | Gly | Glu | Ala | Ala | Glu | Pro | Leu | Glu | Asn |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Glu | Ile | Glu | Asn | Tyr | Glu | Pro | Lys | Leu | Asn | Glu | Tyr | Glu | Asn | Leu | Lys |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ser | Glu | Gly | Asn | Tyr | Val | Gln | Ala | His | Asn | His | Ile | Ala | Ala | Leu | Glu |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Asp | Gln | Ile | Lys | Asn | Leu | Lys | Ser | Tyr | Met | Asp | Glu | Ile | Pro | Glu | Leu |



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      210                      215                      220
Ile Arg Glu Thr Gln Lys Glu Leu Pro Gly Gln Phe Gln Asp Leu Lys
225                      230                      235                      240
Tyr Gly Cys Arg Asp Leu Lys Val Glu Gly Tyr Asp Leu Asp His Val
      245                      250                      255
Lys Val Asp Gly Thr Ile Gln Ser Leu Lys Thr Glu Leu Ser Phe Val
      260                      265                      270
Glu Pro Met Ile Ser Arg Leu Glu Leu Asp Glu Ala Asn Asn Lys Leu
      275                      280                      285
Glu Asn Ile Asn Asp Lys Leu Asp Glu Met Tyr Asp Leu Ile Glu Tyr
      290                      295                      300
Glu Val Lys Ala Lys Asn Glu Val Glu Glu Thr Lys Asp Ile Ile Thr
305                      310                      315                      320
Asp Asp Leu Phe Lys Ala Lys Asp Met Asn Tyr Thr Leu Gln Thr Glu
      325                      330                      335
Ile Glu Tyr Val Arg Glu Asn Tyr Tyr Ile Asn Glu Ser Asp Ala Gln
      340                      345                      350
Ser Val Arg Gln Phe Glu Asn Glu Ile Gln Ser Leu Ile Ser Val Tyr
      355                      360                      365
Asp Asp Ile Leu Lys Glu Thr Ser Lys Ser Ala Val Arg Tyr Ser Glu
      370                      375                      380
Val Gln Asp Asn Leu Gln Tyr Leu Glu Asp His Val Ser Val Ile Asn
385                      390                      395                      400
Lys Glu Gln Asp Lys Leu Gln Asn His Leu Ile Gln Leu Arg Glu Asp
      405                      410                      415
Glu Ala Glu Ala Glu Asp Asn Leu Leu Arg Val Gln Ser Lys Lys Glu
      420                      425                      430
Glu Val Tyr Arg Arg Leu Leu Ala Ser Asn Leu Thr Ser Val Pro Glu
      435                      440                      445
Arg Phe Ile Ile Met Lys Asn Glu Ile Asp Asn Glu Val Arg Glu Val
      450                      455                      460
Asn Glu Gln Phe Arg Glu Arg Pro Ile His Val Lys Gln Leu Lys Asp
465                      470                      475                      480
Lys Val Ala Lys Ile Val Ile Gln Met Asn Thr Phe Glu Asp Glu Ala
      485                      490                      495
Asn Asp Val Leu Val Asn Ala Val Tyr Ala Glu Lys Leu Ile Gln Tyr
      500                      505                      510
Gly Asn Arg Tyr Arg Lys Asp His His His Val Asp Lys Ser Leu Asn
      515                      520                      525
Glu Ala Glu Arg Leu Phe Lys Asn Asn Arg Tyr Lys Arg Ala Ile Glu
      530                      535                      540
Ile Ala Glu Glu Ala Leu Glu Ser Val Glu Pro Gly Ile Thr Lys His
545                      550                      555                      560
Ile Glu Glu Gln Val Ile Lys Glu
      565

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&lt;210&gt; 5955

&lt;211&gt; 41

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5955

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Pro Thr Trp Tyr Trp Gly Ile Leu Leu Gly Asn Arg Phe Thr Ile Val
1                      5                      10                      15
Lys Ser Gly Phe Pro Glu Met Val Ile Ile Trp Leu Lys Ser Phe Leu
      20                      25                      30

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<210> 5956
<211> 370
<212> PRT
<213> S.epidermidis
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[illegible]

370

<210> 5957  
 <211> 121  
 <212> PRT  
 <213> S.epidermidis

<400> 5957  
 Met Gln Tyr Leu Tyr Ile Phe Val Gly Gly Ala Leu Gly Ala Leu Ile  
 1 5 10 15  
 Arg Phe Cys Leu Ser Met Leu Asn Glu Gly Ser Thr Ile Pro Leu Gly  
 20 25 30  
 Thr Phe Val Ala Asn Leu Leu Gly Ala Phe Leu Met Gly Ser Ile Gly  
 35 40 45  
 Ala Leu Ser Leu Ser Leu Phe Lys Thr His Pro Asn Ile Lys Lys Gly  
 50 55 60  
 Leu Thr Thr Gly Leu Leu Gly Ala Leu Thr Thr Phe Ser Thr Phe Gln  
 65 70 75 80  
 Phe Glu Leu Val Thr Leu Phe Asn Gln His His Phe Ile Leu Phe Thr  
 85 90 95  
 Ile Tyr Gly Val Thr Ser Tyr Ile Leu Gly Ile Leu Ser Cys Tyr Leu  
 100 105 110  
 Gly Val Lys Ile Gly Gly Arg Phe Ser  
 115 120

<210> 5958  
 <211> 69  
 <212> PRT  
 <213> S.epidermidis

<400> 5958  
 Phe Tyr His Leu Tyr Tyr Ser Lys Ser Ser Ser Ile Lys Ile Tyr Leu  
 1 5 10 15  
 Asn Ile Phe Leu Asn Asp Ile Arg Ile Cys Phe Leu Arg Ser Thr Leu  
 20 25 30  
 Asn Tyr Leu Met Ile Phe Ile Ser Lys Lys Val Arg Leu Arg Phe Gln  
 35 40 45  
 Ile Lys Ile Leu Ile Val Leu Ser Asp His Ile Cys Asp Leu Gln Cys  
 50 55 60  
 Asn Ser Arg Ile Tyr  
 65

<210> 5959  
 <211> 386  
 <212> PRT  
 <213> S.epidermidis

<400> 5959  
 Lys Pro Phe His Lys Glu Thr Val Lys Gly Lys Phe Ile Met Ala Glu  
 1 5 10 15  
 Leu Lys Arg Gly Leu Glu Gly Val Ile Ala Ala Glu Thr Lys Ile Ser  
 20 25 30  
 Ser Ile Ile Asp Ser Gln Leu Thr Tyr Ala Gly Tyr Asp Ile Asp Asp  
 35 40 45  
 Leu Ala Glu Asn Ala Gln Phe Glu Glu Ile Ile Phe Leu Leu Trp Asn  
 50 55 60

Tyr Arg Leu Pro Asn Glu Asn Glu Leu Ser Glu Leu Lys Glu Lys Leu  
 65 70 75 80  
 Phe Asp Tyr Met Thr Leu Asn Asn Arg Val Tyr Lys His Phe Glu Glu  
 85 90 95  
 Tyr Val Thr Asp His Val His Pro Met Thr Ala Leu Arg Thr Ser Val  
 100 105 110  
 Ser Tyr Val Ala His Phe Asp Pro Glu Ala Glu Asn Glu Ser Asp Glu  
 115 120 125  
 Asn Lys Tyr Asp Arg Ala Ile Arg Ile Gln Ala Lys Ile Ala Ser Leu  
 130 135 140  
 Val Thr Ala Phe Ala Arg Val Arg Asp Gly Lys Glu Pro Val Lys Pro  
 145 150 155 160  
 Asn Ser Glu Leu Ser Tyr Ala Ala Asn Phe Leu Tyr Met Leu Arg Gly  
 165 170 175  
 Glu Leu Pro Thr Glu Val Glu Val Glu Ala Phe Asn Lys Ala Leu Ile  
 180 185 190  
 Leu His Ala Asp His Glu Leu Asn Ala Ser Ala Phe Thr Ala Arg Cys  
 195 200 205  
 Ala Val Ser Ser Leu Ser Asp Met Tyr Ser Gly Val Val Ala Ala Ile  
 210 215 220  
 Gly Ser Leu Lys Gly Pro Leu His Gly Gly Ala Asn Glu Arg Val Met  
 225 230 235 240  
 Ser Met Leu Lys Glu Ile Gly Ser Ile Asp Asn Val Asp His Tyr Leu  
 245 250 255  
 Asp Glu Arg Phe Ala Asn Lys Asp Lys Ile Met Gly Phe Gly His Arg  
 260 265 270  
 Val Tyr Lys Asp Gly Asp Pro Arg Ala Lys Tyr Leu Arg Glu Met Ser  
 275 280 285  
 Arg Lys Ile Thr Glu Glu Thr Gly Gln Ser Glu Leu Phe Glu Met Ser  
 290 295 300  
 Leu Ala Ile Glu Lys Arg Met Lys Glu Glu Lys Gly Leu Ile Pro Asn  
 305 310 315 320  
 Val Asp Phe Phe Ser Ala Thr Val Tyr His Ser Met Asn Ile Pro His  
 325 330 335  
 Asp Leu Phe Thr Pro Ile Phe Ala Val Ser Arg Thr Ser Gly Trp Ile  
 340 345 350  
 Ala His Ile Leu Glu Gln Tyr Arg Asp Asn Arg Ile Met Arg Pro Arg  
 355 360 365  
 Ala Lys Tyr Ile Gly Glu Gln Asn Arg Lys Tyr Val Ser Ile Glu Glu  
 370 375 380  
 Arg Pro  
 385

<210> 5960

<211> 44

<212> PRT

<213> S.epidermidis

<400> 5960

Asn Ser Ile Gln Tyr Val Trp Phe Ala Ile Ile Ile Leu Ile Gln Asn  
 1 5 10 15  
 Ile Leu Lys Gly Ala Ile Arg Lys Cys Gly Ser Gly Lys Gln Lys Met  
 20 25 30  
 Thr Gln Lys Ala Leu Leu Ser Leu Leu Ile Ile Phe  
 35 40



Pro Ile Ser Lys Leu Thr Lys Asp Gln Ala Met Tyr His Phe Leu Ser  
 405 410 415  
 Gly Phe Thr Ser Lys Leu Ala Gly Thr Glu Arg Gly Val Thr Glu Pro  
 420 425 430  
 Gln Pro Ser Phe Ser Thr Cys Phe Gly Ala Pro Phe Leu Pro Leu Ser  
 435 440 445  
 Pro Thr Lys Tyr Ala Asp Leu Leu Gly Asn Leu Ile Asp Ile His Asp  
 450 455 460  
 Val Asp Val Tyr Leu Val Asn Thr Gly Trp Thr Gly Gly Lys Tyr Gly  
 465 470 475 480  
 Ile Gly Arg Arg Ile Ser Leu His Tyr Thr Arg Glu Met Val Asp Gln  
 485 490 495  
 Ala Ile Ser Gly Lys Leu Lys Asn Thr Lys Tyr Ile Lys Asp Asp Thr  
 500 505 510  
 Phe Gly Leu Asn Ile Pro Val Gln Ile Asp Ser Ile Pro Thr Thr Ile  
 515 520 525  
 Leu Asn Pro Ile Asn Ala Trp Asn Asn Lys Asp Asn Tyr Lys Ala Gln  
 530 535 540  
 Ala Tyr Asp Leu Ile Gln Arg Phe Asn Asn Asn Phe Lys Lys Phe Gly  
 545 550 555 560  
 Lys Glu Val Glu His Ile Ala Asn Lys Gly Ala Phe Asn Gln  
 565 570

<210> 5962  
 <211> 53  
 <212> PRT  
 <213> S.epidermidis

<400> 5962  
 Phe Lys Ile Gln Ile Phe Asn Tyr Arg Phe Phe Ser Ile Ser Pro Cys  
 1 5 10 15  
 Lys Met Phe Asn Phe Tyr Cys His Lys Ala Pro Pro Leu Thr Leu Leu  
 20 25 30  
 Tyr Gln Lys Lys Leu Tyr Arg Pro Lys Asn Asn Leu Tyr Asn Asp Val  
 35 40 45  
 Val Leu Lys Asn Glu  
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<210> 5963  
 <211> 330  
 <212> PRT  
 <213> S.epidermidis

<400> 5963  
 Arg Ser Tyr Gln Leu Met Lys Leu Met Asn Lys Ile Ile Val Pro Val  
 1 5 10 15  
 Thr Ala Ser Ala Leu Leu Leu Gly Ala Cys Gly Ser Asn Ala Thr Glu  
 20 25 30  
 Ser Lys Asp Asn Thr Leu Ile Ser Lys Ala Gly Asp Val Lys Val  
 35 40 45  
 Ala Asp Val Met Lys Lys Met Gly Lys Glu Gln Ile Ala Asn Thr Ser  
 50 55 60  
 Phe Ser Ile Val Leu Asn Lys Val Leu Ala Asp Lys Tyr Lys Asp Lys  
 65 70 75 80  
 Val Asp Thr Lys Asp Ile Asp Lys Asp Ile Lys Lys Glu Glu Lys Gln  
 85 90 95

Tyr Gly Gly Lys Asp Gln Phe Glu Ser Met Leu Lys Gln Gln Gly Met  
 100 105 110  
 Ser Leu Asp Asp Tyr Lys Glu Gln Lys Lys Leu Ser Ala Tyr Gln Lys  
 115 120 125  
 Gln Leu Leu Leu Asp Lys Val Asn Val Ser Asp Lys Glu Ile Lys Glu  
 130 135 140  
 Asn Ser Lys Lys Thr Ser His Ile Leu Ile Lys Val Lys Ser Lys Ser  
 145 150 155 160  
 Ser Asp Lys Glu Gly Leu Ser Asp Lys Lys Ala Lys Glu Lys Ala Glu  
 165 170 175  
 Lys Ile Gln Lys Glu Val Glu Lys Asn Pro Asn Lys Phe Gly Glu Ile  
 180 185 190  
 Ala Lys Lys Glu Ser Met Asp Ser Ser Ser Ala Lys Lys Asp Gly Ser  
 195 200 205  
 Leu Gly Tyr Val Ile Lys Gly Gln Met Val Asp Ser Phe Glu Lys Ala  
 210 215 220  
 Leu Phe Lys Leu Lys Glu Gly Glu Val Ser Lys Val Val Lys Thr Asp  
 225 230 235 240  
 Tyr Gly Tyr His Ile Ile Lys Ala Asp Lys Glu Thr Asp Phe Asn Ser  
 245 250 255  
 Glu Lys Ser Asn Ile Lys Gln Lys Leu Ile Glu Glu Lys Val Gln Lys  
 260 265 270  
 Lys Pro Lys Leu Leu Thr Asp Ala Tyr Lys Glu Leu Leu Lys Glu Tyr  
 275 280 285  
 Lys Val Asp Tyr Lys Asp Arg Asp Ile Lys Lys Ala Ile Glu Asp Ser  
 290 295 300  
 Ile Leu Asp Pro Asp Lys Ile Lys Gln Gln Gln Gln Gln Ser Gln  
 305 310 315 320  
 Gly Gly Ser Gly Leu Thr Asn Ser Gly Ser  
 325 330

<210> 5964

<211> 456

<212> PRT

<213> S.epidermidis

<400> 5964

Gly Ser Cys Leu Met Ala Glu Asn Leu Gln Arg Glu Leu Ser Asn Arg  
 1 5 10 15  
 His Val Gln Leu Ile Ala Ile Gly Gly Ala Ile Gly Thr Gly Leu Phe  
 20 25 30  
 Leu Gly Ala Gly Gln Thr Ile Ala Met Thr Gly Pro Ser Ile Leu Leu  
 35 40 45  
 Thr Tyr Ile Ile Ile Gly Phe Met Leu Phe Met Phe Met Arg Gly Leu  
 50 55 60  
 Gly Glu Ile Ile Ile Gln Asn Thr Asn Phe Lys Ser Phe Ala Asp Val  
 65 70 75 80  
 Thr Asn Thr Tyr Ile Gly Pro Phe Ala Gly Phe Val Thr Gly Trp Thr  
 85 90 95  
 Tyr Trp Leu Cys Trp Ile Ile Thr Gly Met Ala Glu Val Thr Ala Val  
 100 105 110  
 Ala Lys Tyr Ile Ser Phe Trp Phe Pro Asp Ile Pro Asn Trp Ile Ser  
 115 120 125  
 Ala Leu Phe Cys Val Leu Ile Leu Met Ser Phe Asn Leu Leu Ser Ala  
 130 135 140  
 Lys Leu Phe Gly Glu Leu Glu Phe Trp Phe Ala Ile Ile Lys Ile Val

145 150 155 160  
 Thr Ile Ile Ala Leu Ile Val Ile Gly Val Ile Met Ile Leu Phe Ala  
 165 170 175  
 Phe Lys Thr Pro Phe Gly Asn Thr Ser Leu Thr His Leu Tyr Gln His  
 180 185 190  
 Gly Ile Phe Pro Lys Gly Ala Ser Gly Phe Phe Met Ser Phe Gln Met  
 195 200 205  
 Ala Leu Phe Ser Phe Val Gly Ile Glu Met Ile Gly Val Thr Ala Arg  
 210 215 220  
 Arg Asn Gln Arg Ser Arg Lys Thr Ile Pro Lys Ala Ile Asn Ser Val  
 225 230 235 240  
 Pro Ile Arg Ile Leu Ile Phe Tyr Val Gly Ala Leu Ala Val Ile Met  
 245 250 255  
 Ser Ile Ile Pro Trp Asp Lys Val Asp Pro Asp Asn Ser Pro Phe Val  
 260 265 270  
 Arg Leu Phe Ala Leu Ile Gly Ile Pro Phe Ala Ala Gly Ile Ile Asn  
 275 280 285  
 Phe Val Val Leu Thr Ala Ala Ala Ser Ser Cys Asn Ser Gly Ile Phe  
 290 295 300  
 Ser Asn Ser Arg Met Leu Tyr Gly Leu Ser Asn Gln Asn Gln Ala Pro  
 305 310 315 320  
 Pro Thr Phe Ala Ser Thr Asn Lys His Gly Val Pro His Lys Ala Ile  
 325 330 335  
 Ile Ala Ser Ser Ala Leu Leu Leu Ile Ala Ala Leu Leu Asn Tyr Ile  
 340 345 350  
 Phe Pro Asp Ala Thr Leu Val Phe Thr Tyr Val Thr Thr Ile Ser Thr  
 355 360 365  
 Val Leu Phe Val Val Val Trp Ala Leu Ile Ile Ile Ala Tyr Ile Asn  
 370 375 380  
 Tyr Ser Arg Lys Asn Pro Glu Leu His Lys Lys Ala Thr Tyr Lys Leu  
 385 390 395 400  
 Pro Gly Gly Gln Tyr Met Gly Tyr Leu Ile Leu Ile Phe Phe Val Phe  
 405 410 415  
 Val Phe Ala Leu Leu Phe Ile Asn Val Asp Thr Arg Arg Ala Ile Tyr  
 420 425 430  
 Cys Thr Pro Ile Trp Phe Ile Leu Leu Gly Leu Met Tyr Leu Arg Tyr  
 435 440 445  
 Lys Lys Ala Asp Lys Glu Ser Arg  
 450 455

&lt;210&gt; 5965

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5965

Pro Leu Asp Gln Gly Ala Met Ala Pro Gln Val Gly Phe Glu Pro Thr  
 1 5 10 15  
 Thr Asp Arg Leu Thr Ala Asp Ser Ser Thr Thr Glu Leu Leu Trp Ile  
 20 25 30  
 Asn Lys Met Glu Arg Val Met Gly Ile Glu Pro Thr Thr Ser Ala Trp  
 35 40 45  
 Lys Ala Glu Val Leu Pro Leu Asn Tyr Thr Arg Leu Met Lys Tyr Asp  
 50 55 60  
 Tyr Gly Ala Val Glu Gly Asn Arg Thr Leu Glu Cys Arg Asn His Asn  
 65 70 75 80



Pro Met Arg

&lt;210&gt; 5966

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5966

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Gly | Gly | Gln | Ile | Asn | Asn | Lys | Ile | Ile | Ala | Lys | Ile | Val | Gln | Lys |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Asn | Ala | Val | Met | Ile | Gly | Thr | Ser | Arg | Phe | Pro | Leu | Lys | Asn | Asp | Lys |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Ala | Ile | Gly | Lys | Phe | Val | Ser | Leu | Asn | Leu | Leu |     |     |     |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |

&lt;210&gt; 5967

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5967

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Leu | Leu | Gln | Tyr | Thr | Ile | Ile | Phe | Ile | Lys | Leu | Lys | His | Ser | Asn |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Phe | His | Ser | Ile | Leu | Asn | Ser | Ile | Phe | Lys | Ile | Lys | Ala | Asn | Asn | Ser |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Leu | Thr | Phe | Gln | Gly | His | Val | Ile | Asn | Lys | Leu |     |     |     |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |

&lt;210&gt; 5968

&lt;211&gt; 456

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5968

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Gly | Leu | Gln | Thr | Tyr | Glu | Tyr | Gly | Leu | Lys | Pro | Gln | Asp | Gly | Phe |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Glu | Val | Ile | Thr | His | Phe | Glu | Phe | Thr | Ser | Gln | His | Leu | Asp | Ile | Leu |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Asn | Arg | Leu | Phe | Thr | Pro | Leu | Ile | Gly | Val | Glu | Ser | Ile | Gly | Leu | Tyr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     | 45  |     |     |
| His | Phe | Met | Ser | Gln | Phe | Ile | Asp | Glu | Ser | Gln | Gln | Leu | Gly | Leu | Thr |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| His | Tyr | Ile | Phe | Met | Asn | Glu | Leu | Lys | Ile | Asn | Leu | Leu | Asp | Phe | Arg |
|     |     | 65  |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Glu | Gln | Met | Asp | Asn | Leu | Glu | Ala | Ile | Gly | Leu | Ile | Lys | Thr | Phe | Val |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Arg | His | Glu | Lys | Lys | Tyr | Ser | His | Phe | Val | Tyr | Glu | Leu | Ile | Gln | Pro |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Pro | Thr | Ala | Tyr | Gln | Phe | Phe | Asn | Asp | Pro | Met | Leu | Ser | Val | Phe | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Phe | Ser | Glu | Val | Asp | Lys | Lys | Arg | Tyr | Gln | Ala | Leu | Lys | Ser | Tyr | Phe |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Glu | Lys | Asp | Glu | Lys | Asp | Leu | Ser | Lys | Tyr | Gln | Gln | Thr | Thr | Arg | Lys |
|     |     | 145 |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Phe | Thr | Glu | Val | Phe | Asn | Val | Pro | Lys | Lys | Val | Asn | Val | Ser | Asp | Gln |

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      165      170      175
Ile Asn Leu Lys Gln Ile Lys His Tyr Asp Gly Ile Asp Leu Ser Asn
      180      185      190
Glu Thr Phe Asp Phe Glu Met Leu Arg Gln Met Leu Asn His His Phe
      195      200      205
Ile Ser Asn Glu Ile Ile Asp Lys Glu Ala Lys Asn Leu Ile Ile Gln
      210      215      220
Leu Ala Thr Leu Tyr Gly Ile Thr Glu Asp Gly Met Lys Asn Val Ile
      225      230      235
Leu Ser Ser Ile Thr Ser Ala Gln Gln Leu Ser Phe Glu Glu Met Arg
      245      250      255
Lys Lys Ala Arg Thr Tyr Tyr Leu Ile Glu His Asp Asn Gln Leu Pro
      260      265      270
Lys Leu Glu His Gln Thr Asn Lys Ile Asn Asp Glu Lys Lys Asp Arg
      275      280      285
Gln Ala Glu Asp Thr Thr Asn Asp Trp Leu Gln Leu Leu Asp Glu Thr
      290      295      300
Ser Pro Ile Asp Met Leu Ala Ser Trp Ser Asp Ser Glu Pro Thr Gln
      305      310      315
Ser Gln Lys Ser Met Ile Glu Glu Leu Ile Asn Arg Glu Lys Met Asn
      325      330      335
Phe Gly Val Ile Asn Ile Leu Leu Gln Phe Val Met Leu Lys Glu Asp
      340      345      350
Met Lys Leu Pro Lys Ser Tyr Ile Phe Glu Ile Ala Ser Asn Trp Lys
      355      360      365
Lys Ile Gly Ile Ser Asn Ala Lys Gln Ala Tyr Glu Tyr Ala Leu Gln
      370      375      380
Val Asn Gln Pro Lys Asn Tyr Glu Thr His Ser Asn Asp Lys Arg Gln
      385      390      395
Asn Asn Arg Gly Arg Gln Asn Gln Phe Leu Ser Lys Glu Lys Thr Pro
      405      410      415
Lys Trp Leu Gln Asn Arg Asp Asp Gln Glu Glu Asn Lys Glu Ile Asn
      420      425      430
Asp Asp Thr Leu Glu Glu Asp Arg Gln Ala Phe Leu Glu Lys Leu Asn
      435      440      445
Gln Lys Trp Lys Glu Glu Asp Asn
      450      455

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&lt;210&gt; 5969

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5969

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Thr Pro Ala Gln Lys Glu Asp Glu Lys Phe Met Ser Ile Glu Asn Phe
1      5      10
Val Asn Leu Lys Lys Tyr Val Ser Asp Pro Pro Ile Gln Ser Tyr Val
      20      25      30
Phe Val Tyr Ile Leu Ile Val Thr Gly Gly Arg Phe Gly Glu Val Gln
      35      40      45
Lys Leu Ser Arg Ser Asp Leu Asp Tyr Lys Asn Asn Thr Ile His Leu
      50      55      60
Pro Gly Thr Lys Thr Glu Thr Ser Asp Arg Thr Val Asp Ile Pro Ala
      65      70      75      80
Ala Asp Met Asn Met Leu Arg Lys Thr Leu Ser Lys Met Pro Val Ser
      85      90      95

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165 170 175  
 180 185 190  
 195 200 205  
 210 215 220  
 225 230 235  
 245 250 255  
 260 265 270  
 275 280 285  
 290 295 300  
 305 310 315  
 325 330 335  
 340 345 350  
 355 360 365  
 370 375 380  
 385 390 395  
 405 410 415  
 420 425 430  
 435 440 445  
 450 455

Leu Ser Asn Gln Leu Phe Ser Thr Gly Val Gly Leu Ile Thr His Asn  
                   100                  105                  110  
 Ala Val Ser Lys Val Leu Gln Lys Phe Cys Leu Glu Asn Lys Ile Gly  
                   115                  120                  125  
 Lys Tyr Thr Leu His Ser Ile Arg His Thr His Cys Ser Tyr Leu Leu  
                   130                  135                  140  
 Leu Asn Asp Val Ser Ile Tyr Tyr Thr Ser Lys Arg Leu Gly Tyr Lys  
 145                  150                  155                  160  
 Asn Ile Lys Thr Thr Met Asp Ala Tyr Phe Ala Ser Ile Arg  
                   165                  170

<210> 5970

<211> 66

<212> PRT

<213> S.epidermidis

<400> 5970

Arg Ile Lys Gln Pro Gln Val Leu Gln Gln Leu Ser Gln Leu Leu Ser  
 1                  5                  10                  15  
 Val Lys Lys Asn Pro Leu Lys Gln Arg Ser Phe Ile Ser Phe Asn Asn  
                   20                  25                  30  
 Ser Asn Tyr Asn Arg Lys Lys Ala Tyr Phe Arg His Ile Phe Tyr Asn  
                   35                  40                  45  
 Tyr Leu Phe Ser Ile Leu Gln Val Ile Glu Phe Gln Gln His Leu Leu  
 50                  55                  60  
 Lys His  
 65

<210> 5971

<211> 54

<212> PRT

<213> S.epidermidis

<400> 5971

Phe Glu Leu Gln His Leu Lys Ile Asn Leu Leu Ser Met Ile Val Leu  
 1                  5                  10                  15  
 Leu Phe Tyr Ile Phe Thr Ser Lys Ser Cys Ile Phe Lys Met Ile Gln  
                   20                  25                  30  
 Phe Ser Phe His Gly Leu Thr Tyr Val Leu Asn Ile Tyr Ser Ser Met  
                   35                  40                  45  
 Thr Ser His Lys Ile Lys  
 50

<210> 5972

<211> 43

<212> PRT

<213> S.epidermidis

<400> 5972

Lys Tyr Phe Asn Val Lys Leu His Met Asn Thr Lys Tyr Phe Gly Glu  
 1                  5                  10                  15  
 Thr Leu Glu Gly Thr Gly Gln Ala Glu Asp Tyr Arg Leu Lys Leu Ser  
                   20                  25                  30  
 Pro Lys Lys Ala Ser Gln Gln Tyr Glu Val Leu  
                   35                  40

<210> 5973  
 <211> 42  
 <212> PRT  
 <213> S.epidermidis

<400> 5973

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Phe | Ile | Lys | Ile | Arg | His | Ile | Pro | Thr | Leu | Lys | Glu | Lys | Ile | Ile |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys | Thr | Ile | Pro | Pro | Ile | Lys | Met | Glu | Glu | Leu | Phe | Cys | Leu | Ile | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Asp | Asp | Arg | Leu | Ile | Tyr | Ile | Cys | Asp |     |     |     |     |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |

<210> 5974  
 <211> 412  
 <212> PRT  
 <213> S.epidermidis

<400> 5974

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Ala | Val | Lys | Val | Met | Gln | Tyr | Asp | His | Leu | Leu | Val | Arg | Tyr | Gly |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu | Leu | Thr | Leu | Lys | Gly | Thr | Asn | Arg | Lys | Met | Phe | Val | Asn | Gln | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Asp | Asn | Val | Lys | Arg | Ala | Leu | Ile | Pro | Leu | Ser | Gly | Tyr | His | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Lys | Gly | Lys | Arg | Asp | Arg | Met | Tyr | Ile | Glu | Leu | Ser | Pro | Glu | Ala | Asp |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Asn | Glu | Ile | Ile | Gln | Arg | Leu | Ser | Lys | Val | Tyr | Gly | Ile | Lys | Ser |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ile | Ser | Pro | Val | Ile | Lys | Ile | Asp | Lys | Asn | Glu | Glu | Lys | Ile | Asn | Gln |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Ala | Ile | Gln | Leu | Ser | His | Asp | Phe | Glu | Lys | Gly | Ser | Thr | Phe | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Val | Asp | Val | Lys | Arg | Val | Asp | Lys | Ser | Phe | Arg | Leu | Asp | Thr | Tyr | Glu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Gln | Arg | Gln | Val | Gly | Gly | Ala | Ile | Leu | Lys | Lys | Asn | Asn | Asn | Ile |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Thr | Val | Asn | Val | Lys | Asn | Pro | Asp | Tyr | Glu | Ile | Lys | Ile | Glu | Val | Arg |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Met | Asp | Ala | Ile | Tyr | Ile | Tyr | Glu | Lys | Val | Ile | Ala | Gly | Ala | Gly | Gly |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Leu | Pro | Val | Gly | Thr | Gly | Gly | Lys | Thr | Leu | Leu | Met | Leu | Ser | Gly | Gly |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |     |
| Ile | Asp | Ser | Pro | Val | Ala | Gly | Ile | Glu | Val | Met | Lys | Arg | Gly | Val | Thr |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Val | Glu | Ala | Ile | His | Phe | His | Ser | Pro | Pro | Phe | Thr | Ser | Glu | Lys | Ala |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Lys | Asp | Lys | Val | Ile | Glu | Leu | Thr | Arg | Ile | Leu | Ala | Glu | Arg | Val | Gly |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Pro | Ile | Lys | Leu | His | Leu | Val | Pro | Phe | Thr | Glu | Ile | Gln | Lys | Gln | Ile |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Asn | Lys | Val | Val | His | Pro | Arg | Tyr | Thr | Met | Thr | Ser | Thr | Arg | Arg | Met |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Met | Met | Arg | Ile | Ser | Asp | Lys | Val | Val | His | Gln | Ile | Asn | Ala | Asn | Ala |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Ile | Val | Asn | Gly | Glu | Asn | Leu | Gly | Gln | Val | Ala | Ser | Gln | Thr | Leu | Lys |

|   |     |     |
|---|-----|-----|
| 290   | 295 | 300 |
| Ser Met Tyr Ala Ile Asn His Val Thr Ala Thr Pro Val Leu Arg Pro |     |     |
| 305   | 310 | 315 |
| Leu Leu Thr Leu Asp Lys Glu Asp Ile Ile Lys Lys Ala Lys Glu Leu |     |     |
|   | 325 | 330 |
| Gly Thr Phe Glu Thr Ser Ile Gln Pro Tyr Glu Asp Cys Cys Thr Ile |     |     |
|   | 340 | 345 |
| Phe Thr Pro Lys Asn Pro Val Thr Glu Pro Asp Phe Asp Lys Val Ile |     |     |
|   | 355 | 360 |
| Lys Tyr Glu Ser Val Phe Asn Phe Asp Glu Met Ile Glu Asn Ala Val |     |     |
|   | 370 | 375 |
| Glu Asn Ile Glu Thr Leu Thr Ile Asp Gln Asn Tyr Lys Ser Ala Lys |     |     |
| 385   | 390 | 395 |
| Glu Gln Ser Thr Asp Ser Leu Ile Lys Asp Leu Phe                 |     |     |
|   | 405 | 410 |

&lt;210&gt; 5975

&lt;211&gt; 345

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5975

|   |     |
|---|-----|
| Trp Asn Val Lys Lys Ile Tyr Gly Asn Leu Glu Leu Lys Ile Asn Leu |     |
| 1   | 5   |
| Val Lys Glu Arg Tyr Val Val Met Lys Lys Ile Ala Val Leu Thr Ser |     |
|   | 20  |
| Gly Gly Asp Ser Pro Gly Met Asn Ala Ala Val Arg Ala Val Thr Arg |     |
|   | 35  |
| Thr Ala Ile Tyr Asn Asn Ile Glu Val Tyr Gly Val Tyr Gln Gly Tyr |     |
|   | 50  |
| Gln Gly Leu Leu Asp Asp Asp Ile His Lys Leu Glu Leu Gly Ser Val |     |
| 65  | 70  |
| Gly Asp Thr Ile Gln Arg Gly Gly Thr Phe Leu Phe Ser Ala Arg Cys |     |
|   | 85  |
| Pro Gln Phe Lys Glu Glu Asp Val Arg Lys Lys Ala Ile Glu Asn Leu |     |
|   | 100 |
| Arg Lys Arg Gly Ile Glu Gly Leu Val Val Ile Gly Gly Asp Gly Ser |     |
|   | 115 |
| Tyr Arg Gly Ala Gln Arg Ile Ser Glu Glu Cys Lys Glu Ile Gln Thr |     |
|   | 130 |
| Ile Gly Ile Pro Gly Thr Ile Asp Asn Asp Ile Asn Gly Thr Asp Phe |     |
| 145   | 150 |
| Thr Ile Gly Phe Asp Thr Ala Leu Asn Thr Ile Ile Glu Ser Val Asp |     |
|   | 165 |
| Lys Ile Arg Asp Thr Ala Ser Ser His Ala Arg Thr Phe Ile Val Glu |     |
|   | 180 |
| Val Met Gly Arg Asp Cys Gly Asp Leu Ala Leu Trp Ala Gly Leu Ser |     |
|   | 195 |
| Val Gly Ala Glu Thr Ile Val Leu Pro Glu Val Asn Thr Asp Ile Lys |     |
|   | 210 |
| Asp Val Ala Glu Lys Ile Glu Gln Gly Ile Lys Arg Gly Lys Lys His |     |
| 225   | 230 |
| Ser Ile Val Met Val Ala Glu Gly Cys Met Ser Gly Gln Glu Cys Ala |     |
|   | 245 |
| Asp Glu Leu Thr Lys Tyr Ile Asn Ile Asp Thr Arg Val Ser Val Leu |     |
|   | 260 |

Gly His Ile Gln Arg Gly Gly Ser Pro Ser Gly Ala Asp Arg Val Leu  
                   275                  280                  285  
 Ala Ser Arg Leu Gly Gly Tyr Ala Val Glu Leu Leu Lys Gln Gly Glu  
                   290                  295                  300  
 Thr Ala Lys Gly Val Gly Ile Arg Asn Asn Gln Leu Thr Ser Thr Pro  
 305                  310                  315                  320  
 Phe Asp Glu Ile Phe Ala Glu Ser Asp Arg Lys Phe Asn Ser Gln Met  
                   325                  330                  335  
 Tyr Glu Leu Ala Lys Glu Leu Ser Ile  
                   340                  345

&lt;210&gt; 5976

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5976

Ile Arg Thr Asn Asp Asn Ala Ile Met Ile Ser Gly Phe Lys Ile Phe  
 1                  5                  10                  15  
 Ala Gly Met Tyr Val Ala Met Ile Ala Pro Pro Pro Glu Ala Thr Asn  
                   20                  25                  30  
 Ile Ser Gly Asn Ile Phe Pro Thr Ile Phe Lys Ser Thr Leu Pro Glu  
                   35                  40                  45  
 Arg Lys Asn Phe Asn Ala Leu Val Asn Val Leu Lys Glu Leu Ala Asn  
                   50                  55                  60  
 Leu Phe Val Pro Lys Ala Thr Asp Gly Gly Lys Pro Thr Ala Ser Asn  
 65                  70                  75                  80  
 Ala Gly Val Glu Ile Ser Pro Pro Pro Pro Thr Thr Glu Ser Thr Asn  
                   85                  90                  95  
 Glu Ala Ile Lys Pro Lys Ala Thr Ile Ile Asn Ile Ile Asp Lys Phe  
                   100                  105                  110  
 Gln Ser Ile Leu Ser Leu Thr Pro Leu Phe Leu Leu His Tyr Glu Phe  
                   115                  120                  125

&lt;210&gt; 5977

&lt;211&gt; 397

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5977

Glu Glu Tyr Asn Met Gln Phe Asp Thr Ile Glu Leu Ala Ile Glu Ala  
 1                  5                  10                  15  
 Leu Arg Asn Gly Glu Ser Ile Ile Val Val Asp Asp Glu Asp Arg Glu  
                   20                  25                  30  
 Asn Glu Gly Asp Leu Val Ala Val Thr Glu Trp Met Asp Asp Asn Thr  
                   35                  40                  45  
 Ile Asn Phe Met Ala Arg Glu Gly Arg Gly Leu Ile Cys Ala Pro Ile  
                   50                  55                  60  
 Asp Lys Ser Ile Ala Glu Arg Leu Lys Leu Gln Ser Met Glu Gln Asn  
 65                  70                  75                  80  
 Asn Thr Asp Ile Tyr Gly Thr His Phe Thr Val Ser Ile Asp His Tyr  
                   85                  90                  95  
 Lys Thr Thr Thr Gly Ile Ser Ala His Glu Arg Thr Gln Thr Ala Arg  
                   100                  105                  110  
 Ala Leu Ile Asp Glu Asn Thr Asn Pro Glu Asp Phe His Arg Pro Gly  
                   115                  120                  125

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Leu | Phe | Pro | Leu | Ile | Ala | Lys | Glu | Asn | Gly | Val | Leu | Thr | Arg | Asn |
| 130 |     |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | His | Thr | Glu | Ala | Ala | Val | Asp | Leu | Ala | Arg | Leu | Thr | Gly | Ala | Gln |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Pro | Ala | Gly | Val | Ile | Cys | Glu | Ile | Met | Asn | Asp | Asp | Gly | Thr | Met | Ala |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |
| Lys | Gly | Glu | Asp | Leu | Gln | Ser | Phe | Lys | Glu | Arg | His | His | Leu | Lys | Met |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ile | Thr | Ile | Lys | Ser | Leu | Val | Ala | Phe | Arg | Lys | Ala | Val | Glu | Leu | Asn |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Val | Asn | Leu | Lys | Ala | Lys | Val | Lys | Met | Pro | Thr | Asp | Phe | Gly | His | Phe |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Asp | Met | Tyr | Gly | Phe | Thr | Thr | Asp | Tyr | Ser | Asp | Glu | Glu | Ile | Val | Ala |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ile | Val | Lys | Gly | Asp | Leu | Lys | Ser | Asn | Pro | Asn | Val | Arg | Met | His | Ser |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     |     | 255 |
| Ala | Cys | Leu | Thr | Gly | Asp | Ile | Phe | His | Ser | Gln | Arg | Cys | Asp | Cys | Gly |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Ala | Gln | Leu | Glu | Ala | Ser | Met | Lys | Tyr | Ile | Asp | Glu | His | Gly | Gly | Met |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Ile | Ile | Tyr | Leu | Pro | Gln | Glu | Gly | Arg | Gly | Ile | Gly | Leu | Ile | Asn | Lys |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Leu | Arg | Ala | Tyr | Glu | Leu | Ile | Glu | Lys | Gly | Tyr | Asp | Thr | Val | Thr | Ala |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Asn | Leu | Ala | Leu | Gly | Phe | Asp | Glu | Asp | Leu | Arg | Asp | Tyr | His | Val | Ala |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     |     | 335 |
| Ala | Glu | Ile | Leu | Lys | Tyr | Phe | Asp | Ile | Ser | Glu | Ile | Asn | Leu | Leu | Ser |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Asn | Asn | Pro | Lys | Lys | Phe | Glu | Gly | Leu | Glu | Asp | Tyr | Gly | Ile | Glu | Ile |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Val | Asp | Arg | Ile | Glu | Leu | Ile | Val | Pro | Glu | Thr | Gln | Tyr | Asn | His | Ser |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Tyr | Met | Glu | Thr | Lys | Lys | Asn | Lys | Met | Gly | His | Leu | Ile |     |     |     |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     |     |

&lt;210&gt; 5978

&lt;211&gt; 138

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5978

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Met | Tyr | Lys | His | Ile | Leu | Leu | Gly | Val | Asp | Thr | Gln | Ile | Lys | Asn |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu | Lys | Ala | Leu | Lys | Glu | Val | Ser | Arg | Leu | Ala | Gly | Glu | Gly | Thr | Ile |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val | Thr | Val | Leu | Asn | Ala | Ile | Asn | Glu | Gln | Asp | Ala | Gln | Ala | Ser | Ile |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Arg | Ala | Gly | Val | His | Leu | Asp | Lys | Leu | Thr | Glu | Lys | Arg | Ser | Lys | Gly |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Glu | Ser | Thr | Leu | Lys | Thr | Leu | Glu | Asp | Tyr | Gly | Ile | Asp | Tyr | Asp |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Glu | Val | Ile | Val | Arg | Gly | Asn | Ala | Lys | Asp | Glu | Leu | Leu | Lys | Phe | Ala |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asn | Ser | Gly | Lys | Tyr | Glu | Ile | Ile | Val | Leu | Ser | Asn | Arg | Lys | Ala | Glu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Glu | Asn | Lys | Lys | Phe | Val | Leu | Gly | Ser | Val | Ser | His | Lys | Val | Ala | Lys |

115 120 125  
 Arg Ala Thr Ile Pro Val Leu Ile Val Lys  
 130 135

<210> 5979  
 <211> 49  
 <212> PRT  
 <213> S.epidermidis

<400> 5979  
 Lys Phe Leu Leu Phe Thr Gln Lys Val Phe Met Leu Lys Ser Gln Val  
 1 5 10 15  
 Ser Val Gln Ile Lys His Leu Phe Leu His Ile Asn Lys Val Tyr Asp  
 20 25 30  
 Tyr Tyr Leu Thr Pro Ile Ala Ser Ile Thr Gln Met Ile Ile Phe Lys  
 35 40 45  
 Gln

<210> 5980  
 <211> 295  
 <212> PRT  
 <213> S.epidermidis

<400> 5980  
 Arg Lys Asp Asn Ile Met Pro Glu Leu Pro Glu Val Glu His Val Lys  
 1 5 10 15  
 Arg Gly Ile Glu Pro Phe Ile Lys Ser Ala Lys Ile Glu Lys Val Thr  
 20 25 30  
 Phe Ala Lys Asn Val Ile Asn Gly Lys Asn Asn Asn Arg Glu Thr Ile  
 35 40 45  
 Ile Lys Gly Met Glu Leu Asp Thr Phe Lys Lys Leu Thr Glu Gly Tyr  
 50 55 60  
 Val Ile Lys Lys Val Glu Arg Arg Ser Lys Tyr Ile Ile Phe Tyr Ile  
 65 70 75 80  
 Ala Asp His Asp Asp Asp Arg Ile Leu Val Ser His Leu Gly Met Ala  
 85 90 95  
 Gly Gly Phe Phe Val Val Asn Asn Leu Asp Glu Ile Ser Thr Pro Asn  
 100 105 110  
 Tyr Arg Lys His Trp Gln Val Ile Phe Asp Leu Asp Asn Lys Gln Lys  
 115 120 125  
 Leu Val Tyr Ser Asp Ile Arg Arg Phe Gly Glu Ile Arg Asn Ile Val  
 130 135 140  
 Asn Phe Asp Ser Tyr Pro Ser Leu Leu Glu Ile Ala Pro Glu Pro Phe  
 145 150 155 160  
 Glu Glu Val Ala Phe Glu His Tyr Leu Glu Cys Leu Thr Met Lys Lys  
 165 170 175  
 Tyr Lys Asn Lys Pro Ile Lys Gln Thr Ile Leu Asp His Arg Val Ile  
 180 185 190  
 Ala Gly Ala Gly Asn Ile Tyr Ala Cys Glu Ala Leu Phe Arg Ala Gly  
 195 200 205  
 Ile Thr Pro Asp Lys Ile Thr Asn Ser Leu Thr Lys Gln Glu Arg Lys  
 210 215 220  
 Ser Leu Phe Tyr Tyr Val Arg Glu Val Leu Glu Glu Gly Ile Lys Tyr  
 225 230 235 240  
 Gly Gly Thr Ser Ile Ser Asp Tyr Arg His Ala Asp Gly Lys Thr Gly



2583

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |  |  |
| Gln | Met | Gln | Leu | His | Leu | Asn | Val | Tyr | Lys | Gln | Lys | Lys | Cys | Lys | Val |  |  |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |  |  |
| Cys | Gly | His | Ser | Ile | Glu | Thr | Lys | Val | Ile | Ala | Gly | Arg | Asn | Ser | His |  |  |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |  |
| Phe | Cys | Pro | Asn | Cys | Gln | Arg |     |     |     |     |     |     |     |     |     |  |  |
|     | 290 |     |     |     |     | 295 |     |     |     |     |     |     |     |     |     |  |  |

<210> 5981  
 <211> 200  
 <212> PRT  
 <213> S.epidermidis

|            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| <400> 5981 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Ile        | Ile | Arg | Asn | Glu | Tyr | Ser | His | Arg | Glu | Glu | Ala | Tyr | Ile | Met | Phe |  |  |
| 1          |     |     | 5   |     |     |     |     |     | 10  |     |     |     | 15  |     |     |  |  |
| Leu        | Cys | Thr | Arg | Gln | Ile | Asp | Ile | His | Ala | Arg | Phe | Gly | Ile | Gln | Arg |  |  |
|            |     |     | 20  |     |     |     | 25  |     |     |     |     | 30  |     |     |     |  |  |
| Ile        | Ala | Phe | Leu | Ser | Leu | Val | Ala | Thr | Ile | Phe | Thr | Phe | Leu | Val | Ser |  |  |
|            |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |  |  |
| Tyr        | Glu | Val | Met | Tyr | Tyr | Phe | Leu | Asp | Thr | Pro | Leu | Ser | Asp | Arg | His |  |  |
|            | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |  |  |
| Phe        | Phe | Val | Leu | Ile | Val | Phe | Ile | Leu | Leu | Met | Tyr | Pro | Ile | His | Lys |  |  |
| 65         |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |  |  |
| Ile        | Val | His | Leu | Leu | Phe | Phe | Leu | Pro | Tyr | Tyr | Lys | Ser | Phe | Lys | Ile |  |  |
|            |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |  |  |
| His        | Lys | Leu | Ser | Ser | Lys | Lys | Trp | Val | Pro | Tyr | Phe | Asn | Thr | Tyr | Val |  |  |
|            |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |  |  |
| Asn        | Thr | Pro | Val | His | Lys | Ile | Tyr | Phe | Cys | Ile | Asn | Leu | Ile | Leu | Pro |  |  |
|            |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |  |  |
| Ile        | Phe | Phe | Leu | Ser | Gly | Ile | Phe | Ile | Met | Leu | Ser | Ile | Tyr | Leu | Pro |  |  |
|            | 130 |     |     |     | 135 |     |     |     | 140 |     |     |     |     |     |     |  |  |
| Gln        | Tyr | Gly | His | Tyr | Phe | Met | Phe | Leu | Leu | Ser | Leu | Asn | Ile | Gly | Cys |  |  |
| 145        |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |  |  |
| Ser        | Met | Met | Asp | Ile | Leu | Tyr | Leu | Lys | Ile | Leu | Leu | Phe | Ser | Asn | Asp |  |  |
|            |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |  |  |
| Gly        | His | Tyr | Val | Glu | Glu | His | Gln | Ser | Gly | Leu | His | Ile | Leu | Asn | Lys |  |  |
|            |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |     |  |  |
| Val        | Asp | Asn | Pro | Tyr | Ile | Gln | His |     |     |     |     |     |     |     |     |  |  |
|            | 195 |     |     |     |     | 200 |     |     |     |     |     |     |     |     |     |  |  |

<210> 5982  
 <211> 48  
 <212> PRT  
 <213> S.epidermidis

|            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| <400> 5982 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Tyr        | Lys | Ser | Lys | Ile | Ile | Leu | Ile | Ser | Phe | Tyr | Phe | Tyr | Ile | Thr | Cys |  |  |
| 1          |     |     | 5   |     |     |     |     |     | 10  |     |     |     | 15  |     |     |  |  |
| Leu        | Tyr | Ile | Cys | Ile | Asn | Asn | Val | Lys | Ser | Gly | Tyr | Ile | Pro | Leu | Arg |  |  |
|            |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |  |  |
| Tyr        | Ala | Thr | Thr | Asn | Val | Tyr | Leu | Tyr | Lys | Val | Ala | His | His | Ile | Lys |  |  |
|            |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |  |  |

<210> 5983  
 <211> 211

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5983

```

Arg Ser Ile Leu Met His Lys Val Ile Leu Val Asp Asp His Tyr Ile
1           5           10           15
Val Arg Gln Gly Leu Glu Phe Leu Leu Ser Thr Val Asp Asp Leu Ser
          20           25           30
Val Leu Lys Gly Phe Lys Asp Gly Ala Thr Phe Leu Ser Tyr Leu Lys
          35           40           45
Asn Asn Glu Arg Pro Asp Ile Val Leu Leu Asp Leu Val Met Pro Glu
          50           55           60
Met Asn Gly Ile Glu Ile Thr Glu Ile Leu Lys Gln Gln Tyr Pro Glu
65           70           75           80
Ile Lys Val Leu Val Leu Thr Ser Tyr Val Asp Asp Glu His Val Ile
          85           90           95
Ser Ala Ile Asp Lys Gly Ala Asp Gly Tyr Glu Met Lys Asp Val Glu
          100          105          110
Pro Gln Lys Leu Ile Glu Thr Ile His Lys Val Leu Gln Gly Glu Arg
          115          120          125
Ile Ile His Pro Gln Ala Lys Ser Val Ile Lys Ala Val Ser Lys Lys
          130          135          140
Pro His Tyr Thr Asn Lys Leu Ser Lys Arg Glu Lys Glu Val Leu Lys
145          150          155          160
Glu Met Val Lys Gly Lys Thr Asn Lys Glu Ile Ala Arg Ala Leu Phe
          165          170          175
Val Ser Glu Lys Thr Val Lys Thr His Val Ser His Ile Phe Ser Lys
          180          185          190
Leu Glu Val Ser Asp Arg Thr Gln Ala Ala Ile Tyr Ala Met Glu Asn
          195          200          205
Lys Leu Ile
          210

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&lt;210&gt; 5984

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5984

```

Val Arg Ile Leu Pro Val Glu Pro Trp Leu Leu Gly Gln Ala Val Lys
1           5           10           15
Thr Pro Pro Phe His Gly Gly Asn Thr Gly Ser Ser Pro Val Gly Val
          20           25           30
Ile Gln Thr Glu Val Lys Tyr Arg Phe Cys Phe Phe Ile Ile Ile Phe
          35           40           45
Tyr His Gly Glu Leu Ser Glu Leu Ala Glu Gly Ala Arg Leu Glu Ser
          50           55           60
Val
65

```

&lt;210&gt; 5985

&lt;211&gt; 336

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5985

```

Asn Val Tyr Lys Glu Glu Ile Met Thr Val Thr Ile Tyr Asp Val Ala
1      5      10      15
Arg Glu Ala Arg Val Ser Met Ala Thr Val Ser Arg Val Val Asn Gly
      20      25      30
Asn Gln Asn Val Lys Pro Glu Thr Arg Asn Lys Val Asn Glu Val Ile
      35      40      45
Lys Arg Leu Asn Tyr Arg Pro Asn Ala Val Ala Arg Gly Leu Ala Ser
      50      55      60
Lys Arg Thr Thr Thr Val Gly Val Ile Ile Pro Asp Ile Ser Asn Val
65      70      75      80
Tyr Tyr Ser Gln Leu Ala Arg Gly Leu Glu Asp Ile Ala Thr Met Tyr
      85      90      95
Lys Tyr His Ser Ile Ile Ser Asn Ser Asp Asn Asp Pro Glu Lys Glu
      100      105      110
Lys Glu Ile Phe Asn Asn Leu Leu Ser Lys Gln Val Asp Gly Ile Ile
      115      120      125
Phe Leu Gly Gly Thr Ile Ser Glu Glu Ile Lys Ser Leu Ile Asn Gln
      130      135      140
Ser Ser Val Pro Val Val Val Ser Gly Thr Asp Gly Lys Asp Asp His
145      150      155      160
Ile Ala Ser Val Asn Ile Asp Phe Lys Gln Ala Ala Glu Glu Ala Thr
      165      170      175
Gln Tyr Leu Ile Glu Lys Gly Ala Lys Thr Phe Ser Leu Ile Gly Gly
      180      185      190
Glu Tyr Ser Ile Lys Ala Gln Asp Asp Val Leu Glu Gly Leu Lys Asn
      195      200      205
Val Leu Ser Gln His Gln Leu Lys Leu Asp Asp Thr Leu His Leu Thr
      210      215      220
Gly Asn Glu Ser Tyr Lys Ser Gly Ile Lys Thr Phe Glu Gln Leu Gln
225      230      235      240
Ser Asn Leu Pro Asp Ala Val Leu Cys Ile Ser Asp Glu Gln Ala Ile
      245      250      255
Gly Ile Leu His Ser Ala Gln Asp Ala Gly Val Lys Val Pro Glu Asp
      260      265      270
Leu Gln Ile Ile Ser Phe Asn Asn Thr Arg Leu Val Glu Met Val Arg
      275      280      285
Pro Gln Leu Ser Ser Val Ile Gln Pro Leu Tyr Asp Ile Gly Ala Val
      290      295      300
Gly Met Arg Leu Leu Thr Lys Tyr Met Asn Asp Glu Glu Ile Glu Asn
305      310      315      320
Pro Asn Val Ile Leu Pro His Arg Ile Glu Tyr Arg Gly Thr Thr Gln
      325      330      335

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&lt;210&gt; 5986

&lt;211&gt; 476

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5986

```

Cys Gly Asn Lys Leu Ala Ser Thr Tyr Glu Gly Lys Gly Ala Ser Met
1      5      10      15
Lys Lys Asn Asn Lys Gln Asn Asp Gly Val Gln Arg Gly Leu Lys Asp
      20      25      30
Arg His Ile Ser Met Ile Ala Ile Gly Gly Cys Ile Gly Thr Gly Leu
      35      40      45
Phe Met Thr Ser Gly Gly Ala Ile His Asp Ala Gly Ala Leu Gly Ala

```



&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5987

```

Phe Asn Asn Asn Asp Leu Arg Gly Val Asn Met Thr Lys His Lys Lys
1      5      10
Gly Ser Ile Leu Ala Ile Ile Gly Leu Leu Ile Val Phe Val Val Thr
      20      25      30
Gly Phe Ile Phe Phe Ser Met Ile Ser Asp Gln Ile Phe Phe Lys His
      35      40      45
Val Lys Pro Val Glu Lys Val Glu Lys Leu Asp Lys Thr Leu Asp Lys
      50      55      60
Ala Ser Lys Lys Gln Ile His Asn Tyr Thr Ser Gln Gln Val Ser Asn
65      70      75      80
Lys Ala Asn Thr Ala Trp Arg Asp Ala Ser Gly Thr Glu Ile Lys Glu
      85      90      95
Ala Met Asp Ser Ser Lys Phe Ile Asp Asp Asp Lys Gln Lys Tyr Gln
      100      105      110
Phe Leu Asp Leu Ser Lys Tyr Gln Gly Ile Asp Lys Asn Arg Ile Lys
      115      120      125
Arg Met Leu Phe Asp Arg Pro Val Leu Leu Lys His Thr Asp Asp Phe
      130      135      140
Ile Asn Ala Ala Lys Ser Lys His Val Asn Glu Val Tyr Leu Ile Ser
145      150      155      160
His Ala Leu Leu Glu Thr Gly Ala Ala Lys Ser Glu Leu Ala Asn Gly
      165      170      175
Val Glu Ile Asp Gly Lys Lys Tyr Tyr Asn Phe Tyr Gly Val Gly Ala
      180      185      190
Leu Asp Ser Asp Pro Ile Lys Thr Gly Ala Glu Tyr Ala Lys Lys His
      195      200      205
Gly Trp Asp Thr Pro Gln Lys Ala Ile Tyr Gly Gly Ala Asp Phe Ile
      210      215      220
His Lys His Phe Leu Ser His Asp Asp Gln Asn Thr Leu Tyr Ser Met
225      230      235      240
Arg Trp Asn Pro Lys Asn Pro Gly Glu His Gln Tyr Ala Thr Asp Ile
      245      250      255
Lys Trp Ala Glu Ser Asn Ala Asn Ile Ile Ala Asp Phe Tyr Lys Asn
      260      265      270
Met Lys Thr Glu Gly Lys Tyr Phe Lys Leu Tyr Val Tyr Lys Asp Asp
      275      280      285
Asp Lys His Gln Lys
      290

```

&lt;210&gt; 5988

&lt;211&gt; 983

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5988

```

Glu Val Asn Lys Met Ile Ile Lys Ser Leu Glu Ile Tyr Gly Tyr Gly
1      5      10      15
Gln Phe Val Gln Arg Lys Ile Glu Phe Asn Arg Gln Phe Thr Glu Ile
      20      25      30
Phe Gly Glu Asn Glu Ala Gly Lys Ser Thr Ile Gln Ala Phe Ile His
      35      40      45
Ser Ile Leu Phe Gly Phe Pro Thr Lys Lys Ser Lys Glu Pro Arg Leu

```

|   |   |                     |     |    |
|---|---|---------------------|-----|----|
| 50  |   | 55                  |     | 60 |
| Glu Pro Arg Leu Gly   | Asn Gln Tyr Gly Gly Lys                     | Leu Ser Leu Ile Phe |     |    |
| 65  | 70  | 75                  | 80  |    |
| Asp Asp Gly Ile Glu   | Ala Glu Val Glu Arg Ile Lys Gly Ser Ala His |                     |     |    |
|   | 85  | 90                  | 95  |    |
| Gly Asp Val Lys Ile Tyr Leu Lys Asp Gly Thr Ile Arg Asp Glu Val |   |                     |     |    |
|   | 100   | 105                 | 110 |    |
| Trp Leu Asn Lys Lys Leu Asn Tyr Ile Ser Lys Lys Thr Tyr Gln Gly |   |                     |     |    |
|   | 115   | 120                 | 125 |    |
| Ile Phe Ser Phe Asp Val Leu Gly Leu Gln Asp Ile His Lys Asn Leu |   |                     |     |    |
|   | 130   | 135                 | 140 |    |
| Asp Glu Glu Gln Leu Gln Asp Tyr Leu Leu Glu Ala Gly Ala Leu Gly |   |                     |     |    |
| 145   | 150   | 155                 | 160 |    |
| Ser Thr Glu Phe Thr Ser Met Arg Asp Arg Ile Gly Gln Lys Lys Glu |   |                     |     |    |
|   | 165   | 170                 | 175 |    |
| Glu Leu Tyr Lys Lys Ser Gly Lys Asn Pro Ile Ile Asn Gln Gln Ile |   |                     |     |    |
|   | 180   | 185                 | 190 |    |
| Glu Gln Leu Lys Gln Leu Glu Asn Gln Ile Arg Asn Glu Glu Ser Lys |   |                     |     |    |
|   | 195   | 200                 | 205 |    |
| Leu Asp Thr Tyr His Arg Leu Val Asp Asp Lys Asp Lys Ser Ser Arg |   |                     |     |    |
|   | 210   | 215                 | 220 |    |
| Arg Leu Glu Asn Leu Lys Gln Asn Leu Asn Gln Leu Ser Lys Met His |   |                     |     |    |
| 225   | 230   | 235                 | 240 |    |
| Glu Gln Lys Gln Lys Glu Val Ala Leu His Asp Gln Thr Gln Glu Trp |   |                     |     |    |
|   | 245   | 250                 | 255 |    |
| Lys Arg Leu Glu Gln Ser Leu Asn Ile Glu Pro Ile Asn Phe Pro Glu |   |                     |     |    |
|   | 260   | 265                 | 270 |    |
| Lys Gly Ile Asp Arg Tyr Glu Thr Ala Lys Ser His Lys Gln Ser Leu |   |                     |     |    |
|   | 275   | 280                 | 285 |    |
| Glu Arg Asp Lys Ser Leu Arg Glu Glu Arg Leu Ser Ile Leu Asn Lys |   |                     |     |    |
|   | 290   | 295                 | 300 |    |
| Glu Ala Glu Ser Ile Asn Pro Val Asp Gln Lys Tyr Ile Asp Ser Phe |   |                     |     |    |
| 305   | 310   | 315                 | 320 |    |
| Asn Ser Leu Tyr Gln Gln Glu Thr Glu Ile Lys Gln Lys Glu Phe Glu |   |                     |     |    |
|   | 325   | 330                 | 335 |    |
| Leu Arg Ser Ile Glu Lys Asp Ile Ala Asp Lys Gln Arg Glu Leu Glu |   |                     |     |    |
|   | 340   | 345                 | 350 |    |
| Ala Leu Gln Ser Asn Ile Gly Trp Gln Glu Val Phe Tyr Asp Ala Asp |   |                     |     |    |
|   | 355   | 360                 | 365 |    |
| Ser Thr Glu Ala Met Lys Ser His Met Ser Asp Leu Val Leu Gly Lys |   |                     |     |    |
|   | 370   | 375                 | 380 |    |
| Gln Glu Gln Ile Ala Tyr Ile Asn Gln Leu Glu Arg Gly Leu Glu Glu |   |                     |     |    |
| 385   | 390   | 395                 | 400 |    |
| Asn Lys Ile Glu Arg Asn Ser Asn Ser Asn Glu Ile Asn Gln Val Glu |   |                     |     |    |
|   | 405   | 410                 | 415 |    |
| Asn Glu Leu Val Pro Asp Glu Thr Phe Glu Lys Lys Lys Glu Tyr Thr |   |                     |     |    |
|   | 420   | 425                 | 430 |    |
| Gln Gln Val Leu Glu Leu His Glu Lys Glu Asn Leu Tyr Glu Lys Leu |   |                     |     |    |
|   | 435   | 440                 | 445 |    |
| Lys Glu Thr Phe Glu Glu Glu Gln Thr Gln Lys Asn Lys Arg Gln Lys |   |                     |     |    |
|   | 450   | 455                 | 460 |    |
| Phe Leu Arg Ile Gly Phe Ile Val Leu Thr Ile Leu Ser Ala Ala Leu |   |                     |     |    |
| 465   | 470   | 475                 | 480 |    |
| Ser Ile Phe Ser Phe Phe Thr Ala Asn Leu Ile Phe Gly Ile Ile Phe |   |                     |     |    |
|   | 485   | 490                 | 495 |    |
| Ala Leu Leu Thr Val Ile Phe Val Val Gly Ile Ile Phe Ser Arg Ser |   |                     |     |    |



945                      950                      955                      960  
 Thr Lys Asp His Val Ile Pro Ala Lys Glu Val Leu Thr Leu Asn Lys  
                                  965                      970                      975  
 Leu Gln Glu Gly Gly Lys Lys  
                                  980

<210> 5989  
 <211> 260  
 <212> PRT  
 <213> S.epidermidis

<400> 5989  
 Gly Lys Leu Asn Lys Phe Lys Arg Lys Val Thr Leu Met Lys Phe Arg  
 1                      5                      10                      15  
 Arg Pro Asn Gln His Phe Gln Ile Val Ala His Arg Gly Leu Pro Glu  
                                  20                      25                      30  
 Asp Tyr Pro Glu Asn Thr Ile Ile Ala Tyr Arg His Ala Leu Met Leu  
                                  35                      40                      45  
 His Ile Asp Met Leu Glu Ile Asp Val His Tyr Thr Lys Asp Lys Glu  
                                  50                      55                      60  
 Leu Val Val Ile His Asp Asp Thr Ile Asp Arg Thr Ser Asn Gly Lys  
 65                      70                      75                      80  
 Gly Lys Val Ser Asp Phe Thr Leu Lys Glu Leu Lys Ala Leu Asp Phe  
                                  85                      90                      95  
 Gly Phe Tyr Lys Gly Glu Lys Phe Lys Gly Glu Ser Ile Pro Thr Phe  
                                  100                      105                      110  
 Asp Glu Val Leu Asp Leu Ala Asp Asn Phe Ser Gln Lys Leu Leu Ile  
                                  115                      120                      125  
 Glu Ile Lys Lys Pro Ser Gln Tyr Pro Asn Ile Glu Asn Met Ile Val  
                                  130                      135                      140  
 Asp Lys Leu Lys Glu Arg Gln Ile Ser Lys Ser Lys Val Ile Leu Gln  
 145                      150                      155                      160  
 Ser Phe Asp Phe Asp Cys Val Lys Lys Leu Ser Ala Met Asn Leu Asp  
                                  165                      170                      175  
 Tyr Glu Leu Gly Leu Leu Ile Ser Lys Lys Lys Tyr Trp His Lys Leu  
                                  180                      185                      190  
 Pro Asn Phe Lys Lys Ile Ala Lys Val Ala Asp Tyr Ala Asn Pro Asn  
                                  195                      200                      205  
 Tyr Gln Ile Val Ser Lys Lys Phe Met Gln Leu Ala His Glu Glu Glu  
                                  210                      215                      220  
 Leu Lys Val Leu Pro Tyr Thr Val Asn Lys Leu Lys Glu Ser Gln Lys  
 225                      230                      235                      240  
 Leu Ile Asp Ile Gly Val Asp Gly Ile Ile Ser Asp Val Pro Glu Asp  
                                  245                      250                      255  
 Leu Phe Glu Leu  
                                  260

<210> 5990  
 <211> 44  
 <212> PRT  
 <213> S.epidermidis

<400> 5990  
 Lys Tyr Ser Leu Gln Ser Phe His Tyr Ile Asn Val His Phe Glu Gly  
 1                      5                      10                      15  
 Ser Leu Ser Ile Asp Ile Ser Gly Phe Val Ile Tyr Lys Phe Ser His





Tyr Asn Tyr Asp Glu Phe Tyr Gln Gln Met Leu Ile Lys Met Trp Gln  
 50 55 60  
 Leu Thr Leu Asp Phe Asp Glu Gln Gln Ser Ser Ser Phe Lys Ser Tyr  
 65 70 75 80  
 Leu Phe Ile Arg Leu Lys Phe Tyr Leu Ile Asp Leu Phe Arg Gln Lys  
 85 90 95  
 Asp Asn Thr Leu Asn Ile Cys Ser Ile Asp Ala Leu Ser Glu Leu Ser  
 100 105 110  
 Pro Ser Phe Ser Ile Asn Glu Ile Asp Leu Leu Ile Lys Asp Ile Ser  
 115 120 125  
 Gln Gln Leu Leu Pro Arg Glu Arg Asp Trp Leu Thr Leu Tyr Leu Gln  
 130 135 140  
 Gly Tyr Lys Gln Tyr Glu Ile Ser Gln Ile Leu Asp Phe Ser Leu Thr  
 145 150 155 160  
 Thr Ile Lys Lys Ile Lys Ser Asn Ala Ile Arg Lys Leu Arg Arg Tyr  
 165 170 175  
 Leu Asn Ser Ser Thr Lys Asp  
 180

<210> 5994

<211> 47

<212> PRT

<213> S.epidermidis

<400> 5994

Ile Gln Ser Lys Val Leu Pro Lys Thr Phe Lys Val Pro Val Cys Gln  
 1 5 10 15  
 Phe Tyr Lys Leu Lys Lys Thr Ala Ile Lys Trp Ile Tyr Phe Thr Arg  
 20 25 30  
 Leu Leu Phe Tyr Phe Ser Tyr Ile Arg Arg Phe Glu Arg Ile Val  
 35 40 45

<210> 5995

<211> 150

<212> PRT

<213> S.epidermidis

<400> 5995

Glu Leu Thr Lys Glu Arg Cys Lys Met Gly Lys Ser Thr Asn Leu Phe  
 1 5 10 15  
 Lys Ile Ala Leu Gly Ile Gly Gly Ala Ile Thr Val Val Ala Leu Ser  
 20 25 30  
 Arg Lys Glu Ser Arg Asp Lys Leu Lys Gln Glu Tyr Asn Lys Tyr Lys  
 35 40 45  
 Glu Asn Pro Glu Ser Tyr Lys Ser Ser Ala Lys Asp Leu Ala Thr Gln  
 50 55 60  
 Ile Gly Asn Lys Ala Asn Glu Thr Ile Gln Glu Val Lys Lys Asn Pro  
 65 70 75 80  
 Lys Asp Tyr Val Glu Arg Ile Lys Ser Asn Pro Lys Glu Phe Leu Glu  
 85 90 95  
 Glu Glu Lys Ser Lys Ile Ile Gly Lys Asn Asp Gln Thr Gln Asp Asp  
 100 105 110  
 Ile Glu Glu Gly Lys Phe Asp Ala Glu Gly Gly Ala Thr Val Asn Asn  
 115 120 125  
 Asn Leu Arg Val Val Thr Glu Asp Asp Leu Lys Asn Asn Lys Asn Ala  
 130 135 140

Leu Gln Asp Lys Lys Glu  
145 150

<210> 5996  
<211> 283  
<212> PRT  
<213> S.epidermidis

<400> 5996

Phe Met Thr Lys Val Phe Ile Asn Gly Glu Phe Val Asn Glu Glu Asp  
1 5 10 15  
Ala Lys Val Ser Tyr Glu Asp Arg Gly Tyr Val Phe Gly Asp Gly Ile  
20 25 30  
Tyr Glu Tyr Ile Arg Ala Tyr Asp Gly Lys Leu Phe Thr Val Lys Glu  
35 40 45  
His Phe Glu Arg Phe Leu Arg Ser Ala Glu Glu Ile Gly Leu Asp Leu  
50 55 60  
Asn Tyr Thr Ile Glu Glu Leu Ile Glu Leu Val Arg Arg Leu Leu Lys  
65 70 75 80  
Glu Asn Asn Val Val Asn Gly Gly Ile Tyr Ile Gln Ala Thr Arg Gly  
85 90 95  
Ala Ala Pro Arg Asn His Ser Phe Pro Thr Pro Pro Val Lys Pro Val  
100 105 110  
Ile Met Ala Phe Thr Lys Ser Tyr Asp Arg Pro Tyr Glu Glu Leu Glu  
115 120 125  
Gln Gly Val Tyr Ala Ile Thr Thr Glu Asp Ile Arg Trp Leu Arg Cys  
130 135 140  
Asp Ile Lys Ser Leu Asn Leu Leu Gly Asn Val Leu Ala Lys Glu Tyr  
145 150 155 160  
Ala Val Lys Tyr Asn Ala Ala Glu Ala Ile Gln His Arg Gly Asp Ile  
165 170 175  
Val Thr Glu Gly Ala Ser Ser Asn Val Tyr Ala Ile Lys Asp Gly Val  
180 185 190  
Ile Tyr Thr His Pro Val Asn Asn Phe Ile Leu Asn Gly Ile Thr Arg  
195 200 205  
Arg Val Ile Lys Trp Ile Ala Glu Asp Glu Gln Ile Pro Phe Lys Glu  
210 215 220  
Glu Thr Phe Thr Val Glu Phe Leu Lys Ser Ala Asp Glu Val Ile Ile  
225 230 235 240  
Ser Ser Thr Ser Ala Glu Val Met Pro Ile Thr Lys Ile Asp Gly Glu  
245 250 255  
Asn Val Gln Asp Gly Gln Val Gly Thr Ile Thr Arg Gln Leu Gln Gln  
260 265 270  
Gly Phe Glu Lys Tyr Ile Gln Ser His Ser Ile  
275 280

<210> 5997  
<211> 245  
<212> PRT  
<213> S.epidermidis

<400> 5997

Met Tyr Lys Lys Ile Arg Arg His Thr Met Ser Gln Lys Ile Leu Val  
1 5 10 15  
Val Asp Asp Glu Gln Ser Ile Val Thr Leu Leu Lys Tyr Asn Leu Glu  
20 25 30

Thr Ala Gly Tyr Ile Val Glu Val Ala Tyr Asp Gly Glu Glu Ala Leu  
           35                          40                          45  
 Lys Lys Val Glu Thr Glu Gln Pro Glu Leu Ile Val Leu Asp Val Met  
           50                          55                          60  
 Leu Pro Lys Lys Asp Gly Ile Glu Val Cys Lys Thr Ile Arg Ser Asp  
 65                          70                          75                          80  
 Lys Asn Leu Val Pro Ile Leu Met Leu Thr Ala Lys Asp Asp Glu Phe  
                           85                          90                          95  
 Asp Arg Val Leu Gly Leu Glu Leu Gly Ala Asp Asp Tyr Met Thr Lys  
                           100                          105                          110  
 Pro Phe Ser Pro Arg Glu Val Val Ala Arg Val Lys Ala Ile Leu Arg  
                           115                          120                          125  
 Arg Ser Gln Phe Val Asn Glu Ile Glu Lys Glu Asp Val Asp Asp Glu  
 130                          135                          140  
 Asp Ile Ile Ile Gly Ser Ile Arg Ile Arg Pro Glu Phe Phe Glu Val  
 145                          150                          155                          160  
 Tyr Lys Glu Asp Glu Leu Leu Glu Leu Thr Pro Lys Glu Phe Glu Leu  
                           165                          170                          175  
 Leu Leu Tyr Leu Ile Glu Arg Gln Gly Arg Val Ile Thr Arg Glu His  
                           180                          185                          190  
 Met Leu Asn Ser Val Trp Asn Tyr Glu Phe Ala Gly Asp Ser Arg Ile  
                           195                          200                          205  
 Val Asp Val His Ile Ser His Leu Arg Asp Lys Leu Glu Glu Asn Pro  
                           210                          215                          220  
 Lys Gln Pro Lys Leu Ile Lys Thr Val Arg Gly Leu Gly Tyr Lys Leu  
 225                          230                          235                          240  
 Glu Arg Pro Lys Ala  
                           245

<210> 5998

<211> 264

<212> PRT

<213> S.epidermidis

<400> 5998

Cys Asn Lys Asn Lys Gly Val Arg Leu Asn Met Asp Trp Asn Leu Ser  
 1                          5                          10                          15  
 Ile Met Leu Met Ile Val Ala Phe Gly Phe Ile Ala Ser Phe Val Asp  
                           20                          25                          30  
 Ser Val Val Gly Gly Gly Gly Leu Ile Ser Thr Pro Ala Leu Leu Ala  
                           35                          40                          45  
 Val Gly Leu Pro Pro Ser Val Ala Leu Gly Thr Asn Lys Phe Ala Ser  
 50                          55                          60  
 Ser Phe Ser Thr Leu Thr Ser Ala Leu Lys Phe Leu Arg Ser Gly Lys  
 65                          70                          75                          80  
 Val Asp Leu Lys Ile Val Gly Lys Met Phe Pro Leu Ile Phe Val Ala  
                           85                          90                          95  
 Ser Gly Gly Gly Ala Ile Ile Ala Thr Tyr Ile Pro Ala Asn Ile Leu  
                           100                          105                          110  
 Lys Pro Leu Ile Ile Ile Ala Leu Ser Leu Val Leu Ile Tyr Thr Val  
                           115                          120                          125  
 Ile Gln Lys Asp Trp Gly Asn Ile Arg Thr Phe Thr Asp Phe Thr Phe  
 130                          135                          140  
 Thr Lys Ala Val Leu Phe Thr Leu Ile Phe Ile Val Ile Gly Phe Tyr  
 145                          150                          155                          160  
 Asp Gly Phe Leu Gly Gly Gly Thr Gly Ser Phe Met Leu Phe Thr Leu

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Leu | Leu | Phe | Gly | Phe | Asp | Phe | Leu | Ser | Ala | Ala | Gly | Asn | Ala | Lys | Val |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Leu | Asn | Phe | Ala | Ser | Asn | Cys | Gly | Ala | Leu | Leu | Phe | Phe | Met | Ile | Leu |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |
| Gly | Gln | Val | Asn | Tyr | Phe | Tyr | Gly | Ile | Ile | Met | Ala | Ser | Ser | Met | Met |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Ile | Gly | Val | Leu | Leu | Gly | Ala | Gln | Phe | Ala | Leu | Lys | Lys | Gly | Val | Gly |  |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |  |
| Tyr | Val | Lys | Ala | Leu | Phe | Leu | Val | Val | Thr | Ala | Ile | Leu | Ile | Ile | Lys |  |  |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |  |  |
| Asn | Leu | Tyr | Asp | Phe | Ile | Val | Gln |     |     |     |     |     |     |     |     |  |  |
|     |     |     | 260 |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

&lt;210&gt; 5999

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 5999

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Val | Val | Lys | Asn | Asn | Ile | Ser | Ala | Gly | Trp | Ser | Ser | Ser | Val | Ala | Arg |  |  |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |  |  |
| Arg | Ala | His | Asn | Pro | Lys | Val | Gly | Gly | Ser | Asn | Pro | Pro | Pro | Ala | Ile |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| His | Val | Leu | Leu | Gly | Leu | Val | Val |     |     |     |     |     |     |     |     |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |  |  |

&lt;210&gt; 6000

&lt;211&gt; 415

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6000

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Ile | Glu | Lys | Asn | Ile | Lys | Arg | Gly | Thr | His | Asp | Met | Asn | Ile | Pro | Lys |  |  |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |  |  |
| Ser | Val | Trp | Trp | Leu | Val | Ile | Gly | Met | Ala | Leu | Asn | Ile | Thr | Gly | Ala |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Ser | Phe | Leu | Trp | Pro | Leu | Asn | Thr | Ile | Phe | Met | Lys | Glu | Glu | Leu | His |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Lys | Ser | Leu | Thr | Ile | Ala | Gly | Ile | Val | Leu | Met | Ile | Asn | Ser | Phe | Gly |  |  |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Met | Val | Val | Gly | Asn | Leu | Leu | Gly | Gly | Ser | Leu | Phe | Asp | Lys | Leu | Gly |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |  |
| Gly | Tyr | Lys | Thr | Ile | Leu | Ile | Gly | Thr | Phe | Thr | Cys | Val | Cys | Ser | Thr |  |  |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |
| Thr | Leu | Leu | Asn | Leu | Phe | His | Gly | Trp | Pro | Trp | Tyr | Ala | Ile | Trp | Leu |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |  |  |
| Val | Leu | Leu | Gly | Phe | Gly | Gly | Gly | Met | Ile | Val | Pro | Ala | Ile | Tyr | Ala |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Met | Ala | Gly | Ala | Val | Trp | Pro | Asn | Gly | Gly | Arg | Gln | Thr | Phe | Asn | Ala |  |  |
|     |     | 130 |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |  |  |
| Ile | Tyr | Leu | Ala | Gln | Asn | Ile | Gly | Val | Ala | Leu | Gly | Ala | Ala | Leu | Gly |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Gly | Phe | Val | Ala | Glu | Phe | Ser | Phe | Asn | Tyr | Ile | Phe | Met | Ala | Asn | Leu |  |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Ile | Met | Tyr | Val | Leu | Phe | Ala | Ile | Val | Ala | Ile | Thr | Gln | Phe | Asn | Leu |  |  |



50

<210> 6003  
 <211> 134  
 <212> PRT  
 <213> S.epidermidis

<400> 6003  
 Met Leu Arg Lys Tyr Trp Ile His Phe Val Ile Val Thr Val Ile Val  
 1 5 10 15  
 Ser Leu Ile Ser Ile Lys Gly Phe Pro Leu Ala Leu Gly Ala Leu Tyr  
 20 25 30  
 Leu Pro Leu Leu Phe Lys Ile Val Gln Leu Gln Leu Asn Leu Ser Lys  
 35 40 45  
 Gly Leu Ile Asp Asn Val Asn Val His Thr Phe Ile Lys Ser Asn Gln  
 50 55 60  
 Ser Gly Val Val Ile Ser Val Ile Cys Cys Leu Leu Ile Thr Gly Val  
 65 70 75 80  
 Leu Thr Tyr Thr Leu Asp Asp Phe Tyr Asn Glu Leu Pro Gly Phe Leu  
 85 90 95  
 Gly Val Leu Val Ser Ile Ser Pro Val Thr Leu Thr Ile Gly Val Ile  
 100 105 110  
 Leu Phe Val Leu Thr Ala Ile Ala Ile Val Gln Ala Thr Lys Ala Lys  
 115 120 125  
 Tyr Gln Gln Ser Lys Asn  
 130

<210> 6004  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

<400> 6004  
 Ser Lys Arg Lys Asn Val Tyr Thr Asn His Leu Ile Val Arg Arg Ser  
 1 5 10 15  
 Ser Thr Val Met Ile Ser Ile Ser Leu Tyr Phe Phe Lys Leu His Glu  
 20 25 30  
 Ile Ser Leu Ser Ser Phe Cys Asn  
 35 40

<210> 6005  
 <211> 650  
 <212> PRT  
 <213> S.epidermidis

<400> 6005  
 Ile Gly Gly Lys Asn Met Asn Gln Ile Asn Ile Gln Phe Pro Asp Gly  
 1 5 10 15  
 Asn Thr Lys Glu Phe Asp Lys Gly Thr Thr Thr Glu Asp Ile Ala Gln  
 20 25 30  
 Ser Ile Ser Pro Gly Leu Arg Lys Lys Ala Val Ala Gly Lys Phe Asn  
 35 40 45  
 Gly Gln Leu Val Asp Leu Thr Arg Pro Leu Glu Gln Asp Gly Ala Ile  
 50 55 60  
 Glu Ile Ile Thr Pro Gly Ser Glu Glu Ala Leu Glu Val Leu Arg His  
 65 70 75 80

Sequence = 6003-6005

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Thr | Ala | His | Leu | Met | Ala | Gln | Ala | Leu | Lys | Arg | Leu | Tyr | Gly | Asp |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Val | Lys | Phe | Gly | Val | Gly | Pro | Val | Ile | Glu | Gly | Gly | Phe | Tyr | Tyr | Asp |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Phe | Asp | Met | Asp | Asp | Lys | Val | Ser | Ser | Asp | Asp | Phe | Asp | Lys | Ile | Glu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Thr | Met | Lys | Gln | Ile | Val | Asn | Glu | Asn | His | Lys | Ile | Val | Arg | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Val | Val | Ser | Lys | Glu | Lys | Ala | Lys | Asp | Phe | Phe | Lys | Asp | Asp | Pro | Tyr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Lys | Leu | Glu | Leu | Ile | Asp | Ala | Ile | Pro | Glu | Asp | Glu | Ser | Val | Thr | Leu |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Tyr | Thr | Gln | Gly | Glu | Phe | Thr | Asp | Leu | Cys | Arg | Gly | Val | His | Val | Pro |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ser | Thr | Ser | Lys | Ile | Lys | Glu | Phe | Lys | Leu | Leu | Ser | Thr | Ala | Gly | Ala |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Tyr | Trp | Arg | Gly | Asn | Ser | Asp | Asn | Lys | Met | Leu | Gln | Arg | Ile | Tyr | Gly |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Thr | Ala | Phe | Phe | Asp | Lys | Lys | Asp | Leu | Lys | Ala | His | Leu | Lys | Met | Leu |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |
| Glu | Glu | Arg | Arg | Glu | Arg | Asp | His | Arg | Lys | Ile | Gly | Lys | Asp | Leu | Glu |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Leu | Phe | Thr | Asn | Asn | Gln | Leu | Val | Gly | Ala | Gly | Leu | Pro | Leu | Trp | Leu |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Pro | Asn | Gly | Ala | Thr | Ile | Arg | Arg | Glu | Ile | Glu | Arg | Tyr | Ile | Val | Asp |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Lys | Glu | Val | Ser | Met | Gly | Tyr | Asp | His | Val | Tyr | Thr | Pro | Val | Leu | Ala |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Asn | Val | Asp | Leu | Tyr | Lys | Thr | Ser | Gly | His | Trp | Asp | His | Tyr | Gln | Glu |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     | 320 |     |
| Asp | Met | Phe | Pro | Ala | Met | Lys | Leu | Asp | Glu | Asp | Glu | Ala | Met | Val | Leu |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Arg | Pro | Met | Asn | Cys | Pro | His | His | Met | Met | Ile | Tyr | Lys | Asn | Lys | Pro |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| His | Ser | Tyr | Arg | Glu | Leu | Pro | Ile | Arg | Ile | Ala | Glu | Leu | Gly | Thr | Met |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| His | Arg | Tyr | Glu | Ala | Ser | Gly | Ala | Val | Ser | Gly | Leu | Gln | Arg | Val | Arg |
|     |     | 370 |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Gly | Met | Thr | Leu | Asn | Asp | Ser | His | Ile | Phe | Val | Arg | Pro | Asp | Gln | Ile |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     | 400 |     |
| Lys | Glu | Glu | Phe | Lys | Arg | Val | Val | Asn | Met | Ile | Gln | Asp | Val | Tyr | Lys |
|     |     |     | 405 |     |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Asp | Phe | Gly | Phe | Glu | Asp | Tyr | Arg | Phe | Arg | Leu | Ser | Tyr | Arg | Asp | Pro |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Glu | Asp | Lys | His | Lys | Tyr | Phe | Asp | Asp | Asp | Glu | Met | Trp | Glu | Lys | Ala |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Glu | Ser | Met | Leu | Lys | Glu | Ala | Ser | Asp | Glu | Leu | Gly | Leu | Thr | Tyr | Glu |
|     |     | 450 |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |
| Glu | Ala | Ile | Gly | Glu | Ala | Ala | Phe | Tyr | Gly | Pro | Lys | Leu | Asp | Val | Gln |
| 465 |     |     |     |     | 470 |     |     |     |     | 475 |     |     |     | 480 |     |
| Val | Lys | Thr | Ala | Met | Gly | Lys | Glu | Glu | Thr | Leu | Ser | Thr | Ala | Gln | Leu |
|     |     |     | 485 |     |     |     |     |     | 490 |     |     |     |     | 495 |     |
| Asp | Phe | Leu | Leu | Pro | Glu | Arg | Phe | Asp | Leu | Thr | Tyr | Ile | Gly | Gln | Asp |
|     |     |     | 500 |     |     |     |     | 505 |     |     |     |     | 510 |     |     |
| Gly | Glu | Gln | His | Arg | Pro | Val | Val | Ile | His | Arg | Gly | Val | Val | Ser | Thr |
|     |     | 515 |     |     |     |     | 520 |     |     |     |     | 525 |     |     |     |



Met Glu Arg Phe Val Ala Phe Leu Thr Glu Glu Thr Lys Gly Ala Phe  
 530 535 540  
 Pro Thr Trp Leu Ala Pro Met Gln Val Glu Ile Ile Pro Val Asn Ile  
 545 550 555 560  
 Asp Leu His Tyr Asp Tyr Ala Arg Leu Leu Gln Asp Glu Leu Lys Ser  
 565 570 575  
 Gln Gly Val Arg Val Glu Ile Asp Asp Arg Asn Glu Lys Met Gly Tyr  
 580 585 590  
 Lys Ile Arg Glu Ala Gln Met Lys Lys Ile Pro Tyr Gln Ile Val Val  
 595 600 605  
 Gly Asp Gln Glu Val Glu Asn Gln Glu Val Asn Val Arg Lys Tyr Gly  
 610 615 620  
 Ser Glu Lys Gln Glu Ser Val Glu Lys Asp Glu Phe Ile Trp Asn Val  
 625 630 635 640  
 Ile Asp Glu Ile Arg Leu Lys Lys His Arg  
 645 650

<210> 6006  
 <211> 156  
 <212> PRT  
 <213> S.epidermidis

<400> 6006  
 Leu Ile Leu Lys Arg Gly Thr Tyr Gln Met Ser Lys Asn Glu Phe Ile  
 1 5 10 15  
 Lys Arg Val Asn Lys Gln Leu Trp Phe Leu Asn Ala Lys Glu Glu Asp  
 20 25 30  
 Ala Leu Asn Lys Tyr Ile Asp Ser Val Asp Gln Asn Lys Ser Ile Asp  
 35 40 45  
 Thr His Lys Pro Ile Arg Phe Ser Asn Glu Tyr Leu Lys Lys Phe Ile  
 50 55 60  
 Phe Asn His Lys Lys Lys Ser Thr Ser His Val Phe Val Leu Leu Ile  
 65 70 75 80  
 Cys Met Val Leu Ala Tyr Ala Phe Leu Leu Gly Leu Phe Ile Leu Gly  
 85 90 95  
 Leu Val Ala Ser Leu Ala Ile Val His Ala Tyr Ile Asn Pro Asn Ile  
 100 105 110  
 Asp Leu Ser Val Phe Val Ile Leu Thr Val Leu Ile Val Ala Ile Ile  
 115 120 125  
 Ile Met Ile Ala Ser Leu Tyr Ala Ile Lys His Thr Thr Ala Leu Phe  
 130 135 140  
 Thr Lys Lys Leu Leu Glu Tyr Lys Phe Asn Lys Arg  
 145 150 155

<210> 6007  
 <211> 905  
 <212> PRT  
 <213> S.epidermidis

<400> 6007  
 Cys Val Val Asn Thr Lys Leu Ala Tyr Ser Leu Cys Ile Cys Ile Tyr  
 1 5 10 15  
 Ala Lys Ile Tyr Val Asn Leu Phe Trp Arg Leu Arg Ile Leu Asn Lys  
 20 25 30  
 Leu Val Leu Ile Asp Gly Asn Ser Leu Ser Phe Arg Ala Phe Tyr Ala  
 35 40 45

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Pro | Leu | Leu | Ser | Asn | His | Ala | Gly | Ile | His | Thr | Asn | Ala | Val | Tyr |
| 50  |     |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Phe | Ala | Met | Leu | Leu | Glu | Lys | Ile | Ile | Lys | Glu | Glu | Lys | Pro | Asn |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| His | Phe | Leu | Val | Ala | Phe | Asp | Ala | Gly | Lys | Thr | Thr | Phe | Arg | His | Ser |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Lys | Tyr | Ser | Glu | Tyr | Lys | Gly | Gly | Arg | Gln | Lys | Thr | Pro | Pro | Glu | Leu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ser | Glu | Gln | Phe | Pro | Tyr | Ile | Arg | Gln | Leu | Leu | Asp | Ala | Tyr | His | Ile |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Arg | Tyr | Glu | Leu | Asp | Asn | Tyr | Glu | Ala | Asp | Asp | Ile | Ile | Gly | Lys |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Ser | Arg | Gln | Ala | Asp | Glu | Glu | Asp | Phe | Glu | Thr | Ile | Ile | Ile | Thr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gly | Asp | Arg | Asp | Leu | Thr | Gln | Leu | Ala | Thr | Asp | Asn | Val | Thr | Ile | Tyr |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Tyr | Thr | Lys | Lys | Gly | Val | Thr | Asp | Val | Asp | His | Tyr | Thr | Pro | Lys | Phe |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ile | Ala | Glu | Lys | Tyr | Asn | Gly | Leu | Val | Pro | Lys | Gln | Ile | Ile | Asp | Met |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Lys | Gly | Leu | Met | Gly | Asp | Thr | Ser | Asp | Asn | Ile | Pro | Gly | Val | Ala | Gly |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Val | Gly | Glu | Lys | Thr | Ala | Ile | Lys | Leu | Leu | Asn | Gln | Phe | Glu | Ser | Val |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Glu | Gly | Val | Tyr | Glu | His | Ile | Glu | Glu | Val | Thr | Ala | Lys | Lys | Leu | Lys |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Glu | Lys | Leu | Ile | Asn | Ser | Lys | Asp | Asp | Ala | Leu | Met | Ser | Lys | Asp | Leu |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Ala | Thr | Ile | Asn | Val | His | Ser | Pro | Ile | Glu | Val | Ser | Leu | Glu | Asp | Thr |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Lys | Leu | Thr | Leu | Gln | Asp | Asp | Thr | Thr | Glu | Lys | Ile | Glu | Leu | Phe | Lys |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Lys | Leu | Glu | Phe | Lys | Gln | Leu | Leu | Ala | Asp | Ile | Asp | Thr | Ser | Ser | Thr |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Asn | Glu | Glu | Val | Ile | Asp | Lys | Thr | Phe | Glu | Ile | Glu | Gln | Asp | Phe | Gln |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Asn | Val | Asp | Leu | Asn | Asp | Leu | Asn | Glu | Ala | Val | Ile | His | Phe | Glu | Leu |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Glu | Gly | Thr | Asn | Tyr | Leu | Lys | Asp | Thr | Ile | Leu | Lys | Phe | Gly | Phe | Tyr |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Thr | Asn | His | Gln | His | Val | Val | Ile | Asn | Ala | Glu | Asp | Val | Lys | Asp | Tyr |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Lys | His | Leu | Val | Gln | Trp | Leu | Glu | Asp | Lys | Asn | Thr | Thr | Lys | Ile | Val |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Tyr | Asp | Ala | Lys | Lys | Thr | Tyr | Val | Ser | Ala | His | Arg | Leu | Gly | Ile | Asn |
|     |     |     | 405 |     |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Ile | Glu | Asn | Ile | Glu | Phe | Asp | Val | Met | Leu | Ala | Ser | Tyr | Ile | Ile | Asp |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Pro | Ser | Arg | Ser | Ile | Asp | Asp | Val | Lys | Ser | Val | Val | Ser | Leu | Tyr | Gly |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Gln | Asn | Tyr | Val | Lys | Asp | Asn | Ile | Thr | Ile | Phe | Gly | Lys | Gly | Lys | Lys |
|     | 450 |     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |
| His | His | Ile | Pro | Glu | Glu | Pro | Ile | Leu | Asn | Glu | His | Ile | Ala | Ser | Val |
| 465 |     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |
| Thr | Glu | Ala | Ile | Ala | Ala | Val | Thr | Pro | Thr | Met | Lys | Ser | Gln | Leu | Glu |
|     |     |     |     | 485 |     |     |     |     | 490 |     |     |     |     | 495 |     |

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Asp Tyr Asn Gln Ile Glu Leu Leu Lys Asp Leu Glu Leu Pro Leu Ala
      500      505      510
Arg Ile Leu Ser Glu Met Glu Glu Ile Gly Ile Tyr Thr Asp Ile Asn
      515      520      525
Asp Leu Lys Glu Met Glu Phe Glu Ile Gln Lys Lys Leu Asp Val Leu
      530      535      540
Ile Ser Asn Ile His Glu Ser Ala Gly Glu Ala Phe Asn Ile Asn Ser
      545      550      555      560
Pro Lys Gln Leu Gly Val Val Leu Phe Glu Thr Leu Gln Leu Pro Val
      565      570      575
Ile Lys Lys Thr Lys Thr Gly Tyr Ser Thr Ala Val Asp Val Leu Glu
      580      585      590
Lys Leu Gln Gly Glu His Pro Ile Asp Asp Ile Leu Glu Tyr Arg
      595      600      605
Gln Leu Ala Lys Leu Gln Ser Thr Tyr Val Glu Gly Leu Gln Lys Val
      610      615      620
Ile Ser Lys Asp His Arg Ile His Thr Arg Phe Asn Gln Thr Leu Ala
      625      630      635      640
Gln Thr Gly Arg Leu Ser Ser Ile Asp Pro Asn Leu Gln Asn Ile Pro
      645      650      655
Ile Arg Leu Glu Glu Gly Arg Lys Ile Arg Lys Ala Phe Lys Pro Thr
      660      665      670
Ser Lys Asp Ser Val Ile Leu Ser Ala Asp Tyr Ser Gln Ile Glu Leu
      675      680      685
Arg Val Leu Ala His Ile Thr Gln Asp Glu Ser Leu Lys His Ala Phe
      690      695      700
Ile Asn Gly His Asp Ile His Thr Ala Thr Ala Met Lys Val Phe Asn
      705      710      715      720
Val Glu Ser Asp Gln Val Asp Ser Leu Met Arg Arg Gln Ala Lys Ala
      725      730      735
Val Asn Phe Gly Ile Val Tyr Gly Ile Ser Asp Tyr Gly Leu Ser Gln
      740      745      750
Ser Leu Gly Ile Thr Arg Lys Gln Ala Lys Ala Phe Ile Asp Asp Tyr
      755      760      765
Leu Ala Ser Phe Pro Gly Val Lys Gln Tyr Met Ser Asp Ile Val Lys
      770      775      780
Asp Ala Lys Ala Gln Gly Tyr Val Glu Thr Leu Leu His Arg Arg Arg
      785      790      795      800
Tyr Ile Pro Asp Ile Thr Ser Arg Asn Val Asn Leu Arg Ser Phe Ala
      805      810      815
Glu Arg Thr Ala Met Asn Thr Pro Ile Gln Gly Ser Ala Ala Asp Ile
      820      825      830
Ile Lys Leu Ala Met Val Lys Phe Ser Glu Lys Ile Lys Glu Thr Lys
      835      840      845
Tyr His Ala Lys Leu Leu Leu Gln Val His Asp Glu Leu Ile Phe Glu
      850      855      860
Ile Pro Lys Ser Glu Val Glu Asp Phe Ser Lys Phe Val Glu Glu Ile
      865      870      875      880
Met Glu Gln Ala Leu Val Leu Asp Val Pro Leu Lys Val Asp Ser Asn
      885      890      895
Tyr Gly Ala Thr Trp Tyr Asp Ala Lys
      900      905

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&lt;210&gt; 6008

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6008

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Glu Asp Ser Lys Met Asn Phe Glu Gly Lys Leu Val Gly Lys Asp Leu
1          5          10          15
Lys Ile Ala Ile Val Val Ser Arg Phe Asn Asp Phe Ile Thr Thr Arg
          20          25          30
Leu Leu Glu Gly Ala Lys Asp Thr Leu Ile Arg His Glu Val Glu Asp
          35          40          45
Thr Asn Ile Asp Val Ala Tyr Val Pro Gly Ala Phe Glu Ile Pro Leu
          50          55          60
Val Ala Lys Lys Leu Ala Gln Lys Gly Glu Tyr Asp Ala Val Ile Thr
65          70          75          80
Leu Gly Cys Val Ile Arg Gly Ala Thr Ser His Tyr Asp Tyr Val Cys
          85          90          95
Asn Glu Val Ala Lys Gly Val Ser Lys Ala Asn Asp Ile Ser Asp Thr
          100          105          110
Pro Val Ile Phe Gly Val Leu Thr Thr Glu Ser Ile Glu Gln Ala Val
          115          120          125
Glu Arg Ala Gly Thr Lys Ala Gly Asn Lys Gly Ser Glu Ala Ala Val
          130          135          140
Ser Ala Ile Glu Met Ala Asn Leu Ile Lys Gln Ile Asn
145          150          155

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&lt;210&gt; 6009

&lt;211&gt; 165

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6009

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Arg Asn Thr Lys Thr Thr Ser Leu Phe Lys Phe Ile Tyr Lys Gly Leu
1          5          10          15
Thr Ser Met Lys Cys Ile Ser Thr His Ser Leu Leu Tyr Ile Gln Thr
          20          25          30
Ala Phe Ser Thr Asn Val Glu Thr Tyr Ile Gln Tyr Glu His Tyr Ala
          35          40          45
Ile His Leu Pro Cys Thr Pro Glu Lys Thr Leu His Tyr Leu Leu Glu
          50          55          60
Leu His Gln Lys Ser Tyr His Asn Gln Cys Met Leu Ser Lys Asn Ile
65          70          75          80
Leu Asn Ile Lys Lys Phe Ile Pro Ile Tyr Ile Asn Glu Glu Thr Ile
          85          90          95
Leu Phe Pro Val Thr Gln Lys Arg Ala Pro Ile Lys Tyr Phe Ile Asn
          100          105          110
Ala Arg Asn Ile Ile Gly Ile His Ser Ser Ile His Thr Thr Met Ile
          115          120          125
Val Phe Glu Asp Gly Thr Thr Ile Glu Leu Asn Ile Pro Tyr Thr Leu
          130          135          140
Val Thr Lys Lys Trp Gln Arg Asn Leu Thr Val Gly His Ile Ile Lys
145          150          155          160
Lys Thr Thr Phe Tyr
          165

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&lt;210&gt; 6010

&lt;211&gt; 341

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6010

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Met Ala Thr Asn Ile Ala Ile Asn Gly Met Gly Arg Ile Gly Arg Met
1          5          10          15
Val Leu Arg Ile Ala Leu Asn Asn Lys Asn Leu Asn Val Lys Ala Ile
          20          25          30
Asn Ala Ser Tyr Pro Pro Glu Thr Ile Ala His Leu Leu Asn Tyr Asp
          35          40          45
Thr Thr His Gly Val Tyr Asp Lys Lys Val Glu Pro Ile Glu Ser Gly
          50          55          60
Ile Lys Val Asn Gly His Glu Ile Lys Leu Leu Ser Asp Arg Asn Pro
65          70          75          80
Glu Asn Leu Pro Trp Asn Glu Met Asp Ile Asp Val Val Ile Glu Ala
          85          90          95
Thr Gly Lys Phe Asn His Gly Asp Lys Ala Val Ala His Ile Asn Ala
          100          105          110
Gly Ala Lys Lys Val Leu Leu Thr Gly Pro Ser Lys Gly Gly Asp Val
          115          120          125
Gln Met Ile Val Lys Gly Val Asn Asp Asn Gln Leu Asp Ile Asp Thr
          130          135          140
Tyr Asp Ile Phe Ser Asn Ala Ser Cys Thr Thr Asn Cys Ile Gly Pro
145          150          155          160
Val Ala Lys Val Leu Asn Asp Lys Phe Gly Ile Ile Asn Gly Leu Met
          165          170          175
Thr Thr Val His Ala Ile Thr Asn Asp Gln Lys Asn Ile Asp Asn Pro
          180          185          190
His Lys Asp Leu Arg Arg Ala Arg Ser Cys Asn Glu Ser Ile Ile Pro
          195          200          205
Thr Ser Thr Gly Ala Ala Lys Ala Leu Lys Glu Val Leu Pro Glu Val
          210          215          220
Glu Gly Lys Leu His Gly Met Ala Leu Arg Val Pro Thr Lys Asn Val
225          230          235          240
Ser Leu Val Asp Leu Val Val Asp Leu Glu Gln Asn Val Thr Val Thr
          245          250          255
Gln Val Asn Asp Ala Phe Lys Asn Ala Asp Leu Ser Gly Val Leu Asp
          260          265          270
Val Glu Glu Ala Pro Leu Val Ser Val Asp Phe Asn Thr Asn Pro His
          275          280          285
Ser Ala Ile Ile Asp Ser Gln Ser Thr Met Val Met Gly Gln Asn Lys
          290          295          300
Val Lys Val Ile Ala Trp Tyr Asp Asn Glu Trp Gly Tyr Ser Asn Arg
305          310          315          320
Val Val Glu Val Ala Asp Lys Ile Gly Gln Leu Ile Asp Asp Lys Ala
          325          330          335
Met Val Lys Ala Ile
          340

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&lt;210&gt; 6011

&lt;211&gt; 835

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6011

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Leu Leu Ala Asn Lys Gly Gly Asn Ala Ala Gln Val Val Pro Phe Lys
1          5          10          15

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Leu | Ile | Val | Glu | Met | Ser | Phe | Tyr | Glu | Leu | Gly | Gly | Asn | Val | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asn | Tyr | Asn | His | Lys | Glu | Ile | Glu | Lys | Lys | Trp | Gln | Asn | Tyr | Trp | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu | Asn | Lys | Thr | Phe | Lys | Thr | Asn | Asp | Asn | Leu | Gly | Gln | Lys | Lys | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Tyr | Ala | Leu | Asp | Met | Phe | Pro | Tyr | Pro | Ser | Gly | Ala | Gly | Leu | His | Val |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Gly | His | Pro | Glu | Gly | Tyr | Thr | Ala | Thr | Asp | Ile | Ile | Ser | Arg | Tyr | Lys |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Arg | Met | Gln | Gly | Tyr | Asn | Val | Leu | His | Pro | Met | Gly | Trp | Asp | Ala | Phe |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | Leu | Pro | Ala | Glu | Gln | Tyr | Ala | Leu | Asp | Thr | Gly | Asn | Asp | Pro | Arg |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Glu | Phe | Thr | Gln | Lys | Asn | Ile | Gln | Thr | Phe | Lys | Arg | Gln | Ile | Gln | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Gly | Phe | Ser | Tyr | Asp | Trp | Asp | Arg | Glu | Val | Asn | Thr | Thr | Asp | Pro |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Glu | Tyr | Tyr | Lys | Trp | Thr | Gln | Trp | Ile | Phe | Ile | Gln | Leu | Tyr | Asn | Lys |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gly | Leu | Ala | Tyr | Val | Asp | Glu | Val | Ala | Val | Asn | Trp | Cys | Pro | Ala | Leu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Gly | Thr | Val | Leu | Ser | Asn | Glu | Glu | Val | Val | Asp | Gly | Val | Ser | Glu | Arg |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Gly | Gly | His | Pro | Val | Tyr | Arg | Lys | Pro | Met | Lys | Gln | Trp | Val | Leu | Lys |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ile | Thr | Glu | Tyr | Ala | Asp | Arg | Leu | Leu | Glu | Asp | Leu | Asp | Glu | Leu | Asp |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Trp | Pro | Glu | Ser | Ile | Lys | Asp | Met | Gln | Arg | Asn | Trp | Ile | Gly | Arg | Ser |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Glu | Gly | Ala | Lys | Val | Thr | Phe | Lys | Ile | Glu | Gln | Ser | Asp | Gln | Asn | Ile |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Glu | Val | Phe | Thr | Thr | Arg | Pro | Asp | Thr | Ile | Tyr | Gly | Thr | Ser | Phe | Leu |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Val | Leu | Ser | Pro | Glu | His | Pro | Leu | Val | Asn | Glu | Ile | Thr | Thr | Ser | Asp |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Lys | Glu | Gln | Glu | Val | Lys | Leu | Tyr | Gln | Asn | Glu | Ala | Ser | Lys | Lys | Ser |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Asp | Leu | Glu | Arg | Thr | Asp | Leu | Ala | Lys | Glu | Lys | Thr | Gly | Val | Phe | Thr |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Gly | Thr | Phe | Ala | Ile | Asn | Pro | Leu | Ser | Gly | Asp | Lys | Leu | Pro | Ile | Trp |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Ile | Ala | Asp | Tyr | Val | Leu | Ser | Thr | Tyr | Gly | Thr | Gly | Ala | Val | Met | Ala |
|     | 355 |     |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Val | Pro | Gly | His | Asp | Glu | Arg | Asp | His | Glu | Phe | Ala | Thr | Lys | Phe | Asn |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Leu | Pro | Ile | Ile | Glu | Val | Ile | Glu | Gly | Gly | Glu | Val | Gln | Lys | Tyr | Ala |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Tyr | Thr | Gly | Glu | Gly | Lys | His | Ile | Asn | Ser | Arg | Glu | Leu | Asp | Gly | Leu |
|     |     |     | 405 |     |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Glu | Asn | Glu | Ala | Ala | Ile | Ser | Lys | Ala | Ile | Glu | Leu | Leu | Glu | Ser | Lys |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Gly | Ala | Gly | Glu | Lys | Lys | Val | Asn | Tyr | Lys | Leu | Arg | Asp | Trp | Leu | Phe |
|     | 435 |     |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Ser | Arg | Gln | Arg | Tyr | Trp | Gly | Glu | Pro | Ile | Pro | Ile | Ile | His | Trp | Glu |
|     | 450 |     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |

Asp Gly Ser Met Thr Thr Val Pro Glu Asp Glu Leu Pro Leu Leu Leu  
 465 470 475 480  
 Pro Glu Thr Asp Glu Ile Lys Pro Ser Gly Thr Gly Glu Ser Pro Leu  
 485 490 495  
 Ala Asn Ile Asp Ala Phe Val Asn Val Ile Asp Glu Lys Thr Gly Met  
 500 505 510  
 Lys Gly Arg Arg Glu Thr Asn Thr Met Pro Gln Trp Ala Gly Ser Cys  
 515 520 525  
 Trp Tyr Tyr Leu Arg Tyr Ile Asp Pro His Asn Glu Lys Met Ile Ala  
 530 535 540  
 Asp Pro Glu Lys Leu Lys His Trp Leu Pro Val Asp Leu Tyr Ile Gly  
 545 550 555 560  
 Gly Val Glu His Ala Val Leu His Leu Leu Tyr Ala Arg Phe Trp His  
 565 570 575  
 Lys Val Leu Tyr Asp Leu Gly Val Val Pro Thr Lys Glu Pro Phe Gln  
 580 585 590  
 Lys Leu Tyr Asn Gln Gly Met Ile Leu Gly Glu Gly Asn Glu Lys Met  
 595 600 605  
 Ser Lys Ser Lys Gly Asn Val Ile Asn Pro Asp Asp Ile Val Ala Ser  
 610 615 620  
 His Gly Ala Asp Thr Leu Arg Leu Tyr Glu Met Phe Met Gly Pro Leu  
 625 630 635 640  
 Asp Ala Ala Ile Ala Trp Ser Glu Lys Gly Leu Asp Gly Ser Arg Arg  
 645 650 655  
 Phe Leu Asp Arg Val Trp Arg Leu Ile Ile Thr Asp Glu Asn Ser Ile  
 660 665 670  
 Asn Lys Lys Ile Val Asp Ser Asn Asn His Ser Leu Asp Lys Val Tyr  
 675 680 685  
 Asn Gln Thr Val Lys Lys Val Thr Glu Asp Phe Asp Thr Leu Ser Phe  
 690 695 700  
 Asn Thr Ala Ile Ser Gln Leu Met Val Phe Ile Asn Glu Cys Tyr Lys  
 705 710 715 720  
 Thr Asn Glu Val Tyr Lys Pro Tyr Ile Glu Gly Phe Val Lys Met Leu  
 725 730 735  
 Ser Pro Ile Ala Pro His Ile Gly Glu Glu Leu Trp Asp Arg Leu Gly  
 740 745 750  
 His Glu Asn Thr Ile Thr Tyr Gln Pro Trp Pro Thr Phe Asp Glu Ser  
 755 760 765  
 Leu Leu Val Asp Asp Glu Val Glu Ile Val Val Gln Val Asn Gly Lys  
 770 775 780  
 Val Arg Ala Lys Ile Asn Ile Pro Lys Asp Leu Ser Lys Glu Glu Met  
 785 790 795 800  
 Gln Asp Leu Ala Leu Ser Asn Asp Asn Val Lys Met Ser Ile Glu Gly  
 805 810 815  
 Lys Glu Val Lys Lys Val Ile Ala Val Pro Gln Lys Leu Val Asn Ile  
 820 825 830  
 Val Ala Lys  
 835

&lt;210&gt; 6012

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6012

Met Met Ala Asn Lys Lys Asp Ser Lys Leu Asn Tyr His Glu Glu Glu

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   |     | 5   |     | 10  |     | 15  |     |     |     |     |     |     |     |     |     |
| Asn | Ala | Met | Val | Thr | Asp | Leu | Asp | Asp | Leu | Lys | Glu | Leu | Gly | Lys | Glu |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Met | Glu | Gln | Ile | Ser | Gln | Glu | Asn | Asp | Glu | Glu | Lys | Leu | Asn | Gln | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| His | Asp | Asn | Glu | Val | Arg | Ser | Asp | Leu | Lys | Lys | Gln |     |     |     |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 6013

&lt;211&gt; 1177

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6013

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Ile | Lys | Lys | Gly | Ser | Val | Ile | Met | Ser | Trp | Phe | Asp | Lys | Leu | Phe |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Gly | Asp | Asp | Asn | Gly | Ser | Asn | Asp | Asp | Leu | Leu | Arg | Lys | Asn | Lys | Asn |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Arg | Arg | Gln | Ser | Gln | Gln | Ser | Lys | Gln | Asn | Asn | Gln | Asp | Ser | Leu | Leu |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Pro | Gln | Asn | Asn | Asp | Ile | Tyr | Ser | Arg | Pro | Arg | Gly | Lys | Phe | Arg | Phe |
|     | 50  |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |
| Pro | Ile | Gln | Val | Ser | Glu | Asn | Glu | Tyr | Thr | Gln | Lys | Asn | Glu | Asn | Tyr |
| 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |     |
| Asn | Glu | His | Asn | Gln | Glu | Glu | Thr | Asn | Asp | Ile | Met | Arg | Ser | Tyr | Asn |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Gln | His | Asp | Asn | Pro | Glu | Phe | Asp | Ser | Ser | Gly | Lys | Arg | His | Arg | Arg |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Arg | Arg | Gln | Ala | Tyr | Ser | Lys | His | Asp | Gln | Ser | Lys | Ile | Thr | Gln | Gln |
|     |     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Lys | Gln | Phe | Ala | Asp | Asn | Asn | Tyr | Thr | Asn | Asn | Asn | Ser | Val | Phe | Asn |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gln | Asn | Asp | Asn | Lys | Lys | Ser | Ser | Gln | Gln | Arg | Lys | Ser | Ile | Gln | Ser |
| 145 |     |     |     | 150 |     |     |     | 155 |     |     |     |     |     | 160 |     |
| Glu | Asn | Ile | Lys | Asn | Lys | Ala | Asn | Thr | Lys | Asn | Thr | Ser | Thr | Ser | Pro |
|     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |     |
| Glu | Phe | Thr | Tyr | Leu | Asn | His | Ser | Phe | Lys | Ser | Ser | Glu | Val | Pro | Ser |
|     |     | 180 |     |     |     | 185 |     |     |     |     |     | 190 |     |     |     |
| Ala | Ile | Phe | Gly | Thr | Lys | Lys | Arg | Arg | Pro | Ile | Glu | Asn | Gly | Val | Ile |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| Pro | Pro | Glu | His | Lys | Glu | Leu | Asn | Asp | Lys | Glu | Ile | Val | Gln | Gln | Asp |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Glu | Val | Ser | His | Ser | Thr | Lys | Ser | Ile | Asp | Ala | Ser | Lys | Asn | Val | Ser |
| 225 |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |     |
| Asn | Ser | Asn | Asp | Asn | Asn | Ile | Glu | Lys | Asn | Gln | Gln | Lys | Lys | Gln | Gln |
|     |     |     | 245 |     |     |     |     | 250 |     |     |     |     |     | 255 |     |
| Thr | Thr | Ala | Gln | Thr | Glu | Ser | Ser | Ser | Glu | Asn | Met | His | Asn | Val | Glu |
|     |     | 260 |     |     |     | 265 |     |     |     |     |     |     | 270 |     |     |
| Lys | Ser | Asn | Tyr | Gln | Thr | Thr | Lys | Arg | Lys | Thr | Pro | Asn | Tyr | Ser | Lys |
|     |     | 275 |     |     |     | 280 |     |     |     |     |     | 285 |     |     |     |
| Val | Asp | Asn | Thr | Ile | Asn | Ile | Glu | Asn | Ile | Tyr | Ala | Ser | Gln | Ile | Val |
|     | 290 |     |     |     | 295 |     |     |     |     |     | 300 |     |     |     |     |
| Glu | Glu | Ile | Arg | Arg | Glu | Arg | Glu | Arg | Lys | Val | Leu | Gln | Lys | Arg | Arg |
| 305 |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |     |
| Phe | Lys | Lys | Ala | Leu | Gln | Gln | Lys | Arg | Gln | Gln | Asn | Gln | Gln | Ser | Glu |
|     |     |     | 325 |     |     |     |     | 330 |     |     |     |     |     | 335 |     |

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Asp | Ser | Ile | Gln | Lys | Ala | Ile | Asp | Glu | Met | Tyr | Ala | Lys | Gln | Ala |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Gln | His | Tyr | Thr | Gly | Glu | Ser | Ser | Leu | Asp | Leu | Glu | Asn | Glu | Ser | Asn |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Gln | Asp | Ser | Ser | Ser | Asn | Ser | Leu | Glu | Lys | Gln | Ser | Asn | Ser | Ser | Asn |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Ile | Asp | Asn | Lys | Glu | Ala | Gln | Asn | Asn | Thr | Pro | Leu | Phe | Asn | Tyr | Glu |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Glu | Ile | Asp | Leu | Asp | Thr | Thr | Ser | Asp | Val | Tyr | Lys | Val | Asn | Glu | Glu |
|     |     |     | 405 |     |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Glu | Thr | Glu | Ser | Lys | Asn | Asp | Glu | Asp | Leu | Val | Ser | Ser | Asn | His | Tyr |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| His | Ser | Asn | Asp | Asp | Ala | Glu | Val | Glu | Asp | Ala | Glu | Tyr | His | Glu | Leu |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Asp | Asp | Asn | Arg | Gln | Gln | Asn | Gln | Ser | Asn | Ser | Gln | Asp | Asp | Ile | Ile |
|     | 450 |     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |
| Ser | Ser | Lys | Ser | Ser | Thr | Ser | Asn | Met | Tyr | Asp | Asn | Ala | Ile | Ser | Ala |
| 465 |     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |
| Ser | Val | Asp | Asn | Asn | Thr | Glu | Arg | Ala | Lys | Ser | Asn | Glu | Asp | Lys | Asn |
|     |     |     |     | 485 |     |     |     |     | 490 |     |     |     |     | 495 |     |
| Asp | Thr | Glu | Ile | Thr | His | Leu | Asp | Gly | Thr | Thr | Ser | Ala | Lys | Val | Ser |
|     |     |     | 500 |     |     |     |     | 505 |     |     |     |     | 510 |     |     |
| Asp | Glu | Lys | Ile | Glu | Ser | Asn | Thr | Asn | Asn | His | Leu | Glu | Gln | Asp | Lys |
|     |     | 515 |     |     |     |     | 520 |     |     |     |     | 525 |     |     |     |
| Asn | Val | Lys | Leu | Lys | Asn | Val | Asn | Ser | Leu | Lys | Ser | Ser | Asn | Ser | Asp |
|     | 530 |     |     |     |     | 535 |     |     |     |     | 540 |     |     |     |     |
| Thr | Gly | Gln | Thr | Arg | Lys | Gln | Arg | Phe | Gly | Gly | Ser | Arg | Pro | Phe | Asn |
| 545 |     |     |     |     | 550 |     |     |     | 555 |     |     |     |     |     | 560 |
| Val | Leu | Met | Thr | Pro | Ser | Asp | Lys | Lys | Arg | Met | Met | Asp | Gln | Asn | His |
|     |     |     |     | 565 |     |     |     |     | 570 |     |     |     |     | 575 |     |
| Lys | Lys | Val | Ser | Val | Pro | Glu | Leu | Lys | Pro | Glu | Lys | Gln | Ala | Asn | Ala |
|     |     |     | 580 |     |     |     |     | 585 |     |     |     |     | 590 |     |     |
| Asn | His | Arg | Lys | Asp | Ser | Glu | Ser | Asn | Lys | Ser | Glu | Glu | Phe | Lys | Gln |
|     |     | 595 |     |     |     |     | 600 |     |     |     |     | 605 |     |     |     |
| Ile | Asn | Thr | Asn | Arg | Glu | Thr | Asp | Ser | Asn | Ser | Tyr | Glu | Ser | Asn | Gly |
|     | 610 |     |     |     |     | 615 |     |     |     |     | 620 |     |     |     |     |
| Ile | Glu | His | Asp | Met | Asn | Ser | Ser | Ser | Asp | Glu | His | Val | Tyr | Glu | Thr |
| 625 |     |     |     |     | 630 |     |     |     |     | 635 |     |     |     |     | 640 |
| Pro | Ser | Lys | Gln | Gln | Asp | Glu | Gln | Ile | Gln | Lys | Leu | Gln | Asp | Asp | Phe |
|     |     |     |     | 645 |     |     |     |     | 650 |     |     |     |     | 655 |     |
| His | Phe | Glu | Asn | Ala | Asn | His | Ala | Lys | Ile | Asn | Asn | Ser | Asn | Glu | Thr |
|     |     |     | 660 |     |     |     |     | 665 |     |     |     |     | 670 |     |     |
| Gly | Asn | Gln | Ser | Asn | Ile | Ser | His | Ser | Lys | Arg | Ser | Gln | Tyr | Ser | Thr |
|     |     | 675 |     |     |     |     | 680 |     |     |     |     | 685 |     |     |     |
| Asn | Glu | Ser | Lys | Asn | Ile | Asp | Thr | Gln | Thr | Ser | Asn | Ser | Ser | Thr | Ser |
|     | 690 |     |     |     |     | 695 |     |     |     |     | 700 |     |     |     |     |
| Asn | Gln | Asn | Phe | Gln | Arg | Ile | Arg | Lys | Gly | Pro | Asn | Ile | Lys | Leu | Pro |
| 705 |     |     |     |     | 710 |     |     |     |     | 715 |     |     |     |     | 720 |
| Ser | Tyr | Gln | Leu | Leu | Glu | Ala | Pro | Glu | Pro | His | Glu | Lys | Asp | Gln | Asp |
|     |     |     |     | 725 |     |     |     |     | 730 |     |     |     |     | 735 |     |
| Trp | Ile | Asp | Asn | Lys | Lys | Gln | Glu | Leu | Asn | Asp | Ala | Leu | Tyr | Tyr | Phe |
|     |     |     | 740 |     |     |     |     | 745 |     |     |     |     | 750 |     |     |
| Asn | Val | Pro | Ala | Glu | Val | Lys | Asn | Val | Thr | Glu | Gly | Pro | Ser | Val | Thr |
|     |     | 755 |     |     |     |     | 760 |     |     |     |     | 765 |     |     |     |
| Arg | Phe | Glu | Leu | Ser | Val | Glu | Lys | Gly | Val | Lys | Val | Ser | Arg | Ile | Thr |
|     | 770 |     |     |     |     | 775 |     |     |     |     |     | 780 |     |     |     |

Ala Leu Gln Asp Asp Ile Lys Met Ala Leu Ala Ala Lys Asp Ile Arg  
 785 790 795 800  
 Ile Glu Ala Pro Ile Pro Gly Thr Ser Leu Val Gly Ile Glu Val Pro  
 805 810 815  
 Asn Gln Asn Pro Thr Lys Val Asn Leu Arg Ser Ile Ile Glu Ser Pro  
 820 825 830  
 Lys Phe Lys Asn Thr Glu Ser Lys Leu Thr Val Ala Met Gly Tyr Arg  
 835 840 845  
 Ile Asn Asn Glu Pro Leu Leu Met Asp Ile Ala Lys Thr Pro His Ala  
 850 855 860  
 Leu Ile Ala Gly Ala Thr Gly Ser Gly Lys Ser Val Cys Ile Asn Ser  
 865 870 875 880  
 Ile Leu Met Ser Leu Leu Tyr Lys Asn His Pro Glu Glu Leu Arg Leu  
 885 890 895  
 Leu Leu Ile Asp Pro Lys Met Val Glu Leu Ala Pro Tyr Asn Asp Leu  
 900 905 910  
 Pro His Leu Val Ser Pro Val Ile Thr Asp Val Lys Ala Ala Thr Gln  
 915 920 925  
 Ser Leu Lys Trp Ala Val Glu Glu Met Glu Lys Arg Tyr Lys Leu Phe  
 930 935 940  
 Ala Gln Tyr His Val Arg Asn Ile Thr Ala Phe Asn Lys Lys Ala Pro  
 945 950 955 960  
 Tyr Glu Gln Arg Met Pro Lys Ile Val Ile Val Ile Asp Glu Leu Ala  
 965 970 975  
 Asp Leu Met Met Met Ala Pro Gln Asp Val Glu Gln Ser Ile Ala Arg  
 980 985 990  
 Ile Ala Gln Lys Ala Arg Ala Cys Gly Ile His Met Leu Val Ala Thr  
 995 1000 1005  
 Gln Arg Pro Ser Val Asn Val Ile Thr Gly Leu Ile Lys Ala Asn Ile  
 1010 1015 1020  
 Pro Thr Arg Ile Ala Phe Met Val Ser Ser Ser Val Asp Ser Arg Thr  
 1025 1030 1035 1040  
 Ile Leu Asp Ser Gly Gly Ala Glu Arg Leu Leu Gly Tyr Gly Asp Met  
 1045 1050 1055  
 Leu Tyr Leu Gly Ser Gly Met Asn Lys Pro Ile Arg Val Gln Gly Thr  
 1060 1065 1070  
 Phe Val Ser Asp Asp Glu Ile Asp Glu Val Val Asp Phe Ile Lys Gln  
 1075 1080 1085  
 Gln Arg Asp Pro Glu Tyr Leu Phe Glu Glu Lys Glu Leu Leu Lys Lys  
 1090 1095 1100  
 Thr Gln Thr Gln Ala Gln Asp Asp Leu Phe Asp Asp Val Cys Glu Phe  
 1105 1110 1115 1120  
 Met Val Glu Glu Gly His Ile Ser Thr Ser Leu Ile Gln Arg His Phe  
 1125 1130 1135  
 Gln Ile Gly Tyr Asn Arg Ala Ala Arg Ile Ile Asp Gln Leu Glu Gln  
 1140 1145 1150  
 Leu Gly Tyr Ile Ser Gly Ala Asn Gly Ser Lys Pro Arg Asp Val Tyr  
 1155 1160 1165  
 Ile Thr Glu Ala Asp Leu Ser Lys Glu  
 1170 1175

&lt;210&gt; 6014

&lt;211&gt; 276

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6014

Lys Met Trp Lys Trp Glu Thr Glu Asn Asp Ala Lys Gly Val Val Val  
 1 5 10 15  
 Ile Ala His Asn Ile Leu Glu His Thr Gly Arg Tyr Ala Tyr Val Ile  
 20 25 30  
 Thr Met Phe Arg Arg Asn Gly Tyr His Val Ile Met Gly Asp Leu Pro  
 35 40 45  
 Gly Gln Gly Gln Thr Ser Arg Ala Gln Lys Gly Gln Ile Asp Asp Phe  
 50 55 60  
 Asn Thr Tyr His Glu Asn Ile Leu Glu Trp Ile Lys Ile Ala Asn Glu  
 65 70 75 80  
 Tyr Lys Ile Pro Thr Phe Val Leu Gly Val Gly Leu Gly Gly Leu Ile  
 85 90 95  
 Ile Leu Asn Leu Leu Glu Lys Thr Glu Leu Pro Ile Glu Gly Ile Leu  
 100 105 110  
 Leu Phe Ser Pro Met Leu Glu Leu Lys Arg Asp Tyr Lys Gly Cys Lys  
 115 120 125  
 Asn Lys Leu Ile Ser Asn Val Gly Lys Ile Ser Lys Asp Thr Arg Phe  
 130 135 140  
 Lys Val Gly Ile Thr Pro Gln Asp Leu Thr Arg Asn Asp Glu Ile Ile  
 145 150 155 160  
 Glu Glu Thr Ala Asn Asp Gly Leu Met Leu Lys Lys Val Thr Tyr Ser  
 165 170 175  
 Trp Tyr Asn Leu Ile Asn Glu Lys Met Lys Glu Thr Met Asp His Ile  
 180 185 190  
 Arg Asp Ile Lys Pro Ile Ser Ala Leu Ile Met Tyr Gly Thr Asn Asp  
 195 200 205  
 Lys Ile Leu Glu Thr Gln Ser Ile Asn Glu Met Lys Asp Lys Leu Lys  
 210 215 220  
 Ser Lys Glu Met Tyr Phe Lys Val Trp Asp Gly Leu Tyr His Glu Ile  
 225 230 235 240  
 His Asn Glu Pro Glu Arg Asp Leu Val Met Arg Tyr Val Leu Ser Phe  
 245 250 255  
 Leu Asn Asn Ser Val Asn Thr Met Gly Phe Ile Val Asn Glu Glu Glu  
 260 265 270  
 Ile Glu Asp Ile  
 275

&lt;210&gt; 6015

&lt;211&gt; 326

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6015

Ile Pro Asn Leu Thr Ser Leu Ile Gln Ile Lys Asp Leu Lys Gly Arg  
 1 5 10 15  
 Phe Leu Leu Met Thr Lys Thr Ile Gly Leu Leu Val Met Ala Tyr Gly  
 20 25 30  
 Thr Pro Tyr Lys Glu Ser Asp Ile Glu Pro Tyr Tyr Thr Asp Ile Arg  
 35 40 45  
 Arg Gly Lys Lys Pro Thr Glu Glu Glu Leu Gln Asp Leu Lys Asp Arg  
 50 55 60  
 Tyr Glu Phe Ile Gly Gly Leu Ser Pro Leu Ala Gly Thr Thr Asp Arg  
 65 70 75 80  
 Gln Ala Glu Ala Leu Leu Glu Ala Leu Asn Lys Glu Gln Asp Asp Val  
 85 90 95

Asn Phe Lys Leu Tyr Leu Gly Leu Lys His Ile Ser Pro Tyr Ile Glu  
                   100                  105                  110  
 Glu Ala Val Glu Gln Met His Asn Asp Gly Ile Lys Glu Ala Val Thr  
                   115                  120                  125  
 Val Val Leu Ala Pro His Tyr Ser Ser Phe Ser Val Gly Ser Tyr Asp  
                   130                  135                  140  
 Gln Arg Ala Gln Glu Lys Ala Asp Glu Tyr Gly Ile Gln Leu Thr His  
 145                  150                  155                  160  
 Ile Lys His Tyr Tyr Gln Gln Pro Lys Phe Ile Lys Tyr Trp Thr Glu  
                   165                  170                  175  
 Lys Ile Asn Glu Thr Leu Glu Gln Ile Pro Asn Gln Glu His Asp Glu  
                   180                  185                  190  
 Thr Val Leu Val Val Ser Ala His Ser Leu Pro Lys Gly Leu Ile Glu  
                   195                  200                  205  
 Arg Asn Asn Asp Pro Tyr Pro His Glu Leu His Glu Thr Ala Glu Ile  
                   210                  215                  220  
 Leu Lys Gln Glu Ser Asn Ile Ile His Val Ala Glu Gly Trp Gln Ser  
 225                  230                  235                  240  
 Glu Gly Asn Thr Gly Thr Pro Trp Leu Gly Pro Asp Val Gln Asp Leu  
                   245                  250                  255  
 Thr Arg Asp Leu Tyr Lys Glu His Gln Phe Lys His Phe Ile Tyr Thr  
                   260                  265                  270  
 Pro Val Gly Phe Val Cys Glu His Leu Glu Val Leu Tyr Asp Asn Asp  
                   275                  280                  285  
 Tyr Glu Cys Lys Val Val Cys Asp Asp Ile Gly Val Asn Tyr Tyr Arg  
                   290                  295                  300  
 Pro Glu Met Pro Asn Thr His Pro Leu Phe Ile Gly Ala Ile Val Asp  
 305                  310                  315                  320  
 Glu Ile Gln Ser His Ile  
                   325

<210> 6016

<211> 388

<212> PRT

<213> S.epidermidis

<400> 6016

Leu Lys Phe Glu Gly Glu Val Leu Ser Val Ile Tyr Leu Asp Asn Ala  
 1                  5                  10                  15  
 Ala Thr Thr Lys Ala Asp Gln Asp Val Val Asp Ser Phe Val Lys Val  
                   20                  25                  30  
 Asn Gln Thr Leu Tyr Phe Asn Pro Asn Ser Pro His His Ala Gly Val  
                   35                  40                  45  
 Gln Ala Glu Gln Leu Leu Leu Lys Ala Lys Ser Glu Ile Asn Arg Ile  
                   50                  55                  60  
 Leu Asn Leu Asn Asn Gln Phe Asp Ile Ile Phe Thr Ser Gly Ala Thr  
 65                  70                  75                  80  
 Glu Ser Asn Asn Ile Leu Leu Lys Gly Ile Ala Tyr Met Lys Lys Glu  
                   85                  90                  95  
 Thr Ala Asn Glu Ile Ile Thr Ser Val Leu Glu His Pro Ser Val Leu  
                   100                  105                  110  
 Glu Val Met Arg Tyr Leu Glu Arg Glu Lys Gly Phe Lys Leu Lys Tyr  
                   115                  120                  125  
 Val Asp Val Thr Lys Glu Gly Lys Leu Asp Thr Glu His Leu Lys Ser  
                   130                  135                  140  
 Leu Met Thr Asp Lys Val Gly Leu Val Thr Cys Met Tyr Val Asn Asn

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145          150          155          160
Ile Met Gly Gln Ile Gln Pro Ile Glu Glu Ile Ala Asn Ile Val Lys
          165          170          175
Asn Tyr Pro Arg Ala His Phe His Val Asp Ala Val Gln Ala Leu Gly
          180          185          190
Lys Val Pro Met Gln Ile Asn His Ile Asp Ser Leu Ser Leu Ser Gly
          195          200          205
His Lys Phe Asn Gly Leu Lys Gly Gln Gly Leu Leu Leu Leu Lys Asn
          210          215          220
Ile Gln Asn Ile Glu Pro Ile Val His Gly Gly Gly Gln Glu Tyr Gly
225          230          235          240
Leu Arg Ser Gly Thr Ile Asn Leu Pro Met Ala Ile Ser Met Val Arg
          245          250          255
Ala Ile Lys Asn Ala Val Asp Gln Thr Lys Glu Leu Asn Leu Arg Leu
          260          265          270
Ser Asn Tyr Lys Asn Lys Leu Leu Ser Phe Leu Ala Glu Tyr Lys Asn
          275          280          285
Val Phe Ile Asn Ser Pro Gln Asn Ala Ser Pro His Ile Ile Asn Ile
          290          295          300
Gly Phe Pro Gly Val Lys Gly Glu Val Leu Val Asn Ala Phe Ser Lys
305          310          315          320
Gln Asn Val Met Val Ser Thr Thr Ser Ala Cys Ser Ser Lys Met Asn
          325          330          335
Lys Leu Asn Glu Val Leu Leu Ala Met Glu Ile Ala Glu Ser Lys Ile
          340          345          350
Glu Gly Ser Ile Arg Ile Ser Leu Gly Ala His Thr Thr Glu Asn Asp
          355          360          365
Ile Leu Ser Phe Met Asn Ala Phe Glu Ser Val Tyr Lys Glu Ile Lys
          370          375          380
Glu Leu Leu Lys
385

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<210> 6017
<211> 44
<212> PRT
<213> S.epidermidis

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<400> 6017
Phe Gln Ser Glu Val Phe Leu Leu Val Tyr Lys Lys Thr Lys Val Val
1          5          10          15
Asn Gln Ile Val Asn Leu Val Leu Ile Ile Leu Leu Asn Pro Leu Val
          20          25          30
Ser Phe Lys Ile Phe Ile Thr Ser Ser Leu Ala Cys
          35          40

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<210> 6018
<211> 73
<212> PRT
<213> S.epidermidis

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<400> 6018
Asn Asp Asp Leu Pro Leu Val Ile Val Arg His Ser Arg Phe Val Pro
1          5          10          15
Val Gln Glu Leu Val Gln Val Leu Ile Ile Lys Val Gly Asn Thr Ala
          20          25          30
Leu Tyr Ile Pro Pro Ile Ile Arg Phe Ile Tyr Phe Ser Lys Asn Ser

```

35                      40                      45  
 Glu Tyr Leu Lys Pro Leu Leu Tyr Ser Tyr His Ile Ile Lys Thr Phe  
 50                      55                      60  
 Thr Cys Leu Lys Phe Val Ile Ala Ile  
 65                      70

<210> 6019  
 <211> 44  
 <212> PRT  
 <213> S.epidermidis

<400> 6019  
 Thr Gly Asn Asp Ile Ile Lys Leu Pro Gly His Cys Thr Arg Val Val  
 1                      5                      10                      15  
 Ala Met Ala Thr Leu Phe Phe Tyr Thr Lys Lys Ala Thr Lys Lys Ser  
 20                      25                      30  
 Leu Leu Lys Val Leu Phe Leu Phe Ile Lys Ile His  
 35                      40

<210> 6020  
 <211> 554  
 <212> PRT  
 <213> S.epidermidis

<400> 6020  
 Val Met Ser Glu Ser Lys Glu Met Val Arg Gly Thr Phe Leu Ile Thr  
 1                      5                      10                      15  
 Ile Ser Ile Leu Ile Thr Lys Val Leu Gly Val Leu Phe Ile Ile Pro  
 20                      25                      30  
 Phe Thr Ala Leu Ile Gly Gly Gln Ala Asn Met Ala Pro Phe Thr Tyr  
 35                      40                      45  
 Ala Tyr Ala Pro Tyr Asn Ile Ala Ile Ala Ile Ala Thr Ala Gly Val  
 50                      55                      60  
 Pro Leu Ala Ala Ser Lys Tyr Val Ala Lys Tyr Asn Ala Leu Gly Ala  
 65                      70                      75                      80  
 Tyr Lys Val Ser Gln Lys Phe Tyr Lys Ser Ser Phe Val Val Met Ser  
 85                      90                      95  
 Ile Thr Gly Ile Val Gly Phe Leu Val Leu Tyr Leu Leu Ala Pro Tyr  
 100                      105                      110  
 Ile Ala Glu Leu Thr Leu Ser Arg Asn Thr His Gly Asn Ser Gly Trp  
 115                      120                      125  
 Thr Val Ala Asp Ile Thr Trp Ile Ile Arg Ile Ile Ser Met Val Val  
 130                      135                      140  
 Ile Phe Ile Pro Val Leu Ala Thr Trp Arg Gly Ile Phe Gln Gly Tyr  
 145                      150                      155                      160  
 Lys Ser Met Gly Pro Thr Ala Val Ser Glu Val Thr Glu Gln Ile Ala  
 165                      170                      175  
 Arg Ile Val Phe Ile Leu Val Gly Ser Tyr Leu Thr Leu Asn Val Phe  
 180                      185                      190  
 Gly Gly Thr Val Leu Gln Ala Asn Gly Ile Ala Thr Phe Ala Ala Ala  
 195                      200                      205  
 Ile Gly Ala Ile Ala Gly Ile Leu Thr Leu Trp Tyr Tyr Trp Ile Lys  
 210                      215                      220  
 Arg Arg Lys Asn Ile Lys Lys Met Val Asp Ser Asp Thr Ala Asn Leu  
 225                      230                      235                      240  
 Asn Val Ser Tyr Gly Lys Met Tyr Lys Glu Ile Ile Ala Tyr Ser Ile

245 250 255  
 Pro Phe Val Ile Val Ser Leu Asn Phe Pro Leu Phe Asn Leu Val Asp  
 260 265 270  
 Gln Phe Thr His Asn Gly Ala Leu Asn Leu Val Gly Val Lys Pro Gly  
 275 280 285  
 Leu Gln Asp Ile Phe Phe Asn Met Leu Asn Met Ser Thr Asn Lys Ile  
 290 295 300  
 Val Met Ile Pro Thr Ser Leu Ser Ala Gly Phe Ala Val Ser Leu Ile  
 305 310 315 320  
 Pro Phe Ile Thr Lys Thr Tyr Glu Glu Gly Arg Tyr Ala Glu Met His  
 325 330 335  
 Arg Gln Ile Arg Thr Ser Ile Gly Val Leu Met Phe Ile Thr Val Pro  
 340 345 350  
 Ala Ser Ile Gly Ile Met Ala Leu Ala Gln Pro Leu Phe Thr Val Phe  
 355 360 365  
 Tyr Gly Phe Asp Pro Val Val His Gly His Asp Pro Asn Phe Asp Gly  
 370 375 380  
 Ser Arg Leu Leu Phe Tyr Tyr Ala Pro Val Ala Ile Leu Ile Ser Leu  
 385 390 395 400  
 Leu Ser Val Thr Ala Ser Met Leu Gln Gly Ile Asp Lys Gln Lys Leu  
 405 410 415  
 Thr Val Phe Val Ile Leu Gly Ser Val Leu Ile Lys Leu Ile Leu Asn  
 420 425 430  
 Tyr Pro Leu Ile Met Leu Leu His Thr Pro Gly Ala Val Leu Ser Thr  
 435 440 445  
 Ala Ile Ala Leu Leu Phe Ala Ile Cys Cys Asn Phe Tyr Ile Leu Lys  
 450 455 460  
 Lys Tyr Ala Asn Phe Lys Phe Ser Tyr Ser Trp Ile His Leu Ala Lys  
 465 470 475 480  
 Ile Ile Leu Ile Ser Ile Ile Met Met Ile Gly Val Glu Val Ile Phe  
 485 490 495  
 Phe Ile Leu Arg Leu Phe Leu Glu Pro Thr Arg Phe Asn Tyr Leu Ile  
 500 505 510  
 Ile Val Ala Ile Gly Val Ile Val Gly Ala Ile Ile Tyr Gly Gly Ile  
 515 520 525  
 Thr Ile Lys Thr Lys Leu Ala Asp Glu Phe Leu Gly Asp Ile Pro Ala  
 530 535 540  
 Lys Ile Arg Arg Lys Val Lys Met Leu Arg  
 545 550

&lt;210&gt; 6021

&lt;211&gt; 208

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6021

Arg Lys Ser Glu Ile Met Ser Lys Val Ile Gly Ile Thr Gly Gly Ile  
 1 5 10 15  
 Ala Thr Gly Lys Ser Thr Val Ser Glu Leu Leu Thr Ala Tyr Gly Phe  
 20 25 30  
 Lys Ile Val Asp Ala Asp Ile Ala Ser Arg Glu Ala Val Lys Lys Gly  
 35 40 45  
 Ser Lys Gly Leu Glu Gln Val Lys Glu Ile Phe Gly Glu Glu Ala Ile  
 50 55 60  
 Asp Glu Asn Gly Glu Met Asn Arg Gln Tyr Val Gly Glu Ile Val Phe  
 65 70 75 80

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | His | Pro | Asp | Leu | Arg | Glu | Ala | Leu | Asn | Glu | Ile | Val | His | Pro | Ile |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Val | Arg | Glu | Ile | Met | Glu | Gln | Glu | Lys | Asn | Asn | Tyr | Leu | Glu | His | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Tyr | His | Val | Ile | Met | Asp | Ile | Pro | Leu | Leu | Tyr | Glu | Asn | Glu | Leu | Gln |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asp | Thr | Val | Asp | Glu | Val | Trp | Val | Val | Tyr | Thr | Ser | Glu | Ser | Ile | Gln |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ile | Asp | Arg | Leu | Met | Glu | Arg | Asn | Asn | Leu | Ser | Leu | Glu | Asp | Ala | Lys |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ala | Arg | Val | Tyr | Ser | Gln | Ile | Ser | Ile | Asp | Lys | Lys | Ser | Arg | Met | Ala |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Asp | His | Val | Ile | Asp | Asn | Leu | Gly | Asp | Lys | Leu | Glu | Leu | Lys | Gln | Asn |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Leu | Gln | Lys | Leu | Leu | Glu | Glu | Glu | Gly | Tyr | Ile | Gln | Ser | Glu | Ser | Glu |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |

&lt;210&gt; 6022

&lt;211&gt; 48

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6022

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Leu | Asn | Glu | Leu | Lys | Ile | Ile | Lys | Lys | Phe | Lys | Lys | Asp | Asn | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr | Ile | Ile | Ser | Ile | Glu | Ile | Val | Phe | Ile | Tyr | Leu | Ser | Trp | Thr | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Ser | Gln | Leu | Leu | Tyr | Phe | Phe | Ile | Ile | Thr | Ile | Leu | Cys | Gln | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

&lt;210&gt; 6023

&lt;211&gt; 85

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6023

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Thr | Leu | Asp | Met | Pro | Ala | Ser | Met | Ile | Leu | Ser | Thr | Gln | Gly | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Val | Glu | Pro | Trp | Cys | Val | Gln | Gly | Ser | Asn | Glu | Thr | Tyr | Met | Val | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Trp | Val | Phe | Lys | Pro | Ala | Ile | Ser | Ile | Ala | Cys | Thr | Ser | Ala | Cys |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Leu | Ser | Pro | Phe | Phe | Lys | Cys | Ala | Pro | Lys | Pro | Thr | Ile | Leu | Pro | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Thr | Thr | Thr | Asp | Pro | Thr | Gly | Gly | Leu | Thr | Pro | Val | Cys | Pro | Phe |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Thr | Ile | Phe | Ala | Asn |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 85  |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 6024

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6024

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Met | Leu | Asp | Phe | Glu | Lys | Pro | Leu | Phe | Glu | Ile | Arg | Asn | Lys | Ile |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|



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1           5           10           15
Asp Ser Leu Lys Glu Ser Gln Glu Lys Asn Glu Val Asp Leu Gln Asp
      20      25      30
Glu Ile Asp Met Leu Glu Ala Ser Leu Lys Arg Glu Thr Thr Lys Val
      35      40      45
Tyr Thr Asn Leu Lys Pro Trp Asp Arg Val Gln Ile Ala Arg Leu Pro
      50      55      60
Glu Arg Pro Thr Thr Leu Asp Tyr Ile Pro Tyr Ile Phe Asp Ser Phe
65      70      75      80
Ile Glu Leu His Gly Asp Arg Ser Phe Arg Asp Asp Pro Ala Met Ile
      85      90      95
Gly Gly Ile Gly Tyr Leu Asp Gly Lys Ser Val Thr Val Ile Gly Gln
      100      105      110
Gln Arg Gly Lys Asp Thr Lys Asp Asn Ile Tyr Arg Asn Phe Gly Met
      115      120      125
Ala His Pro Glu Gly Tyr Arg Lys Ala Leu Arg Leu Met Lys Gln Ala
      130      135      140
Glu Lys Phe Asn Arg Pro Ile Phe Thr Phe Ile Asp Thr Lys Gly Ala
145      150      155      160
Tyr Pro Gly Lys Ala Ala Glu Glu Arg Gly Gln Ser Glu Ser Ile Ala
      165      170      175
Lys Asn Leu Met Glu Met Ala Ser Leu Thr Val Pro Val Ile Ala Val
      180      185      190
Val Ile Gly Glu Gly Gly Ser Gly Gly Ala Leu Gly Ile Gly Ile Ser
      195      200      205
Asn Arg Val Leu Met Leu Glu Asn Ser Thr Tyr Ser Val Ile Ser Pro
      210      215      220
Glu Gly Ala Ala Ala Leu Leu Trp Lys Asp Ser Asn Leu Ala Gln Ile
225      230      235      240
Ala Ala Glu Thr Met Lys Ile Thr Ala Leu Asp Leu Leu Asp Leu Gly
      245      250      255
Ile Ile Asp Glu Val Ile Asn Glu Pro Leu Gly Gly Ala Gln Lys Asp
      260      265      270
Glu Glu Val Gln Ala Leu Ser Ile Lys Lys Met Phe Leu Lys His Leu
      275      280      285
Asn Glu Leu Asn Gln Leu Thr Pro Glu Glu Leu Ala Asn Asp Arg Phe
      290      295      300
Glu Lys Phe Arg Lys Ile Gly Ser Val Val Glu
305      310      315

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&lt;210&gt; 6025

&lt;211&gt; 69

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6025

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Arg His Leu Glu Ala Ser Asn Leu Ile Leu Ser Ile Ser Thr Ile Ile
1           5           10           15
Ile Phe Gln Leu Ile Ile Leu Leu Leu Leu Leu Phe Lys Tyr Arg
      20      25      30
Asn Ile Ser Pro Leu Tyr Leu Phe Phe Ile Phe Phe Val Asn Tyr Lys
      35      40      45
Lys Tyr Asn Ile Asp Asp Ile Trp Cys Ser Thr Leu Lys Ser Ile Thr
      50      55      60
Ser Val Ile Lys Gly
65

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<210> 6026  
 <211> 413  
 <212> PRT  
 <213> S.epidermidis

<400> 6026

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Met | Ser | Glu | Gln | Glu | Lys | Asn | Gln | His | His | Tyr | Arg | Asn | Ser | Ser |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gln | Lys | Arg | His | Thr | Phe | Pro | Trp | Ile | Lys | Thr | Ile | Ile | Val | Ala | Ile |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Ala | Gly | Ile | Ile | Gly | Ala | Leu | Leu | Val | Leu | Gly | Ile | Gly | Lys | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Leu | Asn | Lys | Thr | Gly | Phe | Asn | Asn | Glu | Gly | Ala | Thr | Val | His | Gln | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Asn | Ser | His | Gly | Gly | Asn | Gln | Leu | Asp | Gly | Lys | Ser | Asn | Gln | Tyr |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Lys | Ser | Val | His | Asp | Met | Ile | Lys | Asp | Val | Ser | Pro | Ala | Ile | Val | Gly |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Val | Ile | Asn | Met | Gln | Lys | Ser | Thr | Asn | Leu | Asp | Asp | Leu | Phe | Asn | Gly |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Lys | Ala | Ser | Lys | Ser | Lys | Glu | Ala | Gly | Ile | Gly | Ser | Gly | Val | Ile | Tyr |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gln | Ile | Ser | Asp | Gly | Ser | Ala | Tyr | Ile | Val | Thr | Asn | Asn | His | Val | Val |
| 130 |     |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asp | Gly | Ala | Ser | Glu | Ile | Lys | Val | Gln | Leu | His | Asn | Ser | Lys | Gln | Val |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Asp | Ala | Lys | Leu | Ile | Gly | Lys | Asp | Ala | Leu | Thr | Asp | Ile | Ala | Val | Leu |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Lys | Ile | Lys | Asp | Thr | Lys | Gly | Ile | Lys | Ala | Ile | Gln | Phe | Ala | Asn | Ser |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ser | Lys | Val | Gln | Thr | Gly | Asp | Ser | Val | Phe | Ala | Met | Gly | Asn | Pro | Leu |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| Gly | Leu | Glu | Phe | Ala | Asn | Ser | Val | Thr | Ser | Gly | Ile | Ile | Ser | Ala | Ser |
|     | 210 |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |     |
| Glu | Arg | Thr | Ile | Asp | Ala | Asn | Thr | Ser | Ala | Gly | Asn | Thr | Lys | Val | Asn |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     | 240 |     |
| Val | Leu | Gln | Thr | Asp | Ala | Ala | Ile | Asn | Pro | Gly | Asn | Ser | Gly | Gly | Ala |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Leu | Val | Asp | Ile | Asn | Gly | Asn | Leu | Val | Gly | Ile | Asn | Ser | Met | Lys | Ile |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Ala | Ala | Ala | Gln | Val | Glu | Gly | Ile | Gly | Phe | Ala | Ile | Pro | Ser | Asn | Glu |
|     | 275 |     |     |     |     | 280 |     |     |     |     |     | 285 |     |     |     |
| Val | Arg | Val | Thr | Ile | Glu | Gln | Leu | Val | Lys | His | Gly | Lys | Ile | Glu | Arg |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Pro | Ser | Ile | Gly | Ile | Gly | Leu | Ile | Asn | Leu | Ser | Asp | Ile | Pro | Glu | Asn |
| 305 |     |     |     | 310 |     |     |     |     |     | 315 |     |     |     | 320 |     |
| Tyr | Arg | Lys | Glu | Leu | His | Thr | His | Lys | Asp | Lys | Gly | Val | Tyr | Val | Ala |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Lys | Val | Asp | Ser | Glu | Asn | Ala | Ile | Lys | Lys | Gly | Asp | Ile | Ile | Thr | Gly |
|     |     | 340 |     |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Ile | Asp | Gly | Lys | Gln | Ile | Lys | Asp | Asp | Thr | Asp | Leu | Arg | Thr | Tyr | Leu |
|     | 355 |     |     |     |     | 360 |     |     |     |     |     | 365 |     |     |     |
| Tyr | Glu | Ser | Lys | Lys | Pro | Gly | Glu | Met | Val | Thr | Leu | Lys | Val | Ile | Arg |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Asp | Gly | Lys | Thr | Gln | Asp | Ile | Asn | Val | Lys | Leu | Lys | Lys | Gln | Ala | Ser |

6026-6026

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<210> 6027
<211> 263
<212> PRT
<213> S.epidermidis
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|         |         |         |         |        |         |     |         |         |         |         |         |         |         |         |     |
|---------|---------|---------|---------|--------|---------|-----|---------|---------|---------|---------|---------|---------|---------|---------|-----|
| Lys 1   | His     | Leu     | Asp     | Phe 5  | Ile     | Lys | Glu     | Lys     | Arg 10  | Met     | Pro     | Ile     | Glu     | Tyr 15  | Glu |
| Thr     | His     | Phe     | Phe 20  | Asn    | Glu     | Val | Thr     | Tyr 25  | Leu     | Val     | Asp     | Tyr     | Leu 30  | Lys     | Val |
| Lys     | Ala     | Leu     | Met 35  | Met    | Ile     | Pro | Lys 40  | Asn     | Lys     | Lys     | Asp     | Ile 45  | Lys     | Arg     | Ile |
| Val     | Ile 50  | Tyr     | Leu     | Arg    | Gly 55  | Gly | Lys     | Gly     | Gln     | Val     | Gly 60  | Arg     | Val     | Arg     | Ala |
| Ala 65  | Arg     | Leu     | Met     | Gln 70 | Phe     | Ala | Asn     | Glu     | Tyr 75  | Thr     | Leu     | Val     | Ile     | Gly 80  | Pro |
| Tyr     | Tyr     | Arg     | Gly 85  | Asn    | Asn     | Gly | Ser     | Glu     | Gly 90  | Arg     | Asp     | Glu     | Phe 95  | Tyr     | Arg |
| Gly     | Asp     | Leu     | Asn 100 | Asp    | Val     | Thr | His     | Leu 105 | Ile     | Arg     | Leu     | Leu     | Asn 110 | Gln     | Asn |
| Tyr     | Pro     | Ser 115 | Ala     | Phe    | Ile     | His | Met 120 | Val     | Gly     | Phe     | Ser     | Arg 125 | Gly     | Gly     | Leu |
| Gln     | Gly 130 | Leu     | Leu     | Thr    | Phe 135 | Asn | Asp     | Leu     | Pro     | Val     | Asp 140 | Ser     | Tyr     | Met     | Ile |
| Trp 145 | Gly     | Gly     | Val     | Ser    | Asp 150 | Ile | His     | Leu     | Met     | Tyr 155 | Glu     | Glu     | Arg     | Val     | Asp |
| Leu     | Arg     | Gly     | Met 165 | Leu    | Arg     | Arg | Met     | Val     | Gly 170 | His     | Pro     | Lys     | Lys     | Asp 175 | Ala |
| Lys     | Ala     | Tyr     | Lys 180 | Ser    | Arg     | Asp | Ala 185 | Met     | Gln     | Phe     | Ile     | Lys     | Lys     | Asp 190 | Ser |
| Pro     | Pro 195 | Ile     | Leu     | Ile    | Ile     | His | Gly 200 | Gly     | Lys     | Asp     | Ile     | Gln     | Val     | Gly     | Ile |
| His     | Gln 210 | Ala     | Tyr     | Asp    | Leu     | Glu | Lys 215 | Lys     | Leu     | Lys     | Ser     | Lys     | Gly     | Ile     | Tyr |
| Tyr 225 | Gln     | Thr     | Tyr     | Tyr    | Gln 230 | Leu | Asp     | Glu     | Gly     | His     | Val     | Pro     | Arg     | Pro     | Pro |
| Ala     | Met     | Arg     | Asp 245 | Val    | Ile     | Arg | Tyr     | Ile     | His     | Gln 250 | Trp     | Met     | Asn     | Asp     | Val |
| Glu     | Asn     | Lys     | Asn 260 | Leu    | Asn     | Ile |         |         |         |         |         |         |         |         |     |

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<210> 6028
<211> 427
<212> PRT
<213> S.epidermidis
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Lys Gly Met Glu Val Ile Ile Met Tyr Gln Thr Ile Val Ile Gly Gly  
1 5 10 15  
Gly Pro Ser Gly Ala Met Ala Ala Val Ala Ala Ser Glu Lys Asn Lys  
20 25 30  
Ser Val Leu Leu Ile Glu Lys Lys Lys Gly Leu Gly Arg Lys Leu Lys

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |  |  |
| Ile | Ser | Gly | Gly | Gly | Arg | Cys | Asn | Val | Thr | Asn | Arg | Leu | Pro | Tyr | Asp |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Glu | Ile | Ile | Lys | Asn | Ile | Pro | Gly | Asn | Gly | Lys | Phe | Leu | Tyr | Ser | Pro |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |  |
| Phe | Ser | Val | Phe | Asp | Asn | Leu | Ser | Ile | Ile | Asn | Phe | Phe | Glu | Thr | Arg |  |  |
|     |     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |  |  |
| Gly | Val | Lys | Leu | Lys | Glu | Glu | Asp | His | Gly | Arg | Met | Phe | Pro | Val | Ser |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Asn | Lys | Ser | Gln | Asp | Val | Val | Asp | Val | Leu | Ile | Asn | Gln | Leu | Lys | Glu |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Asn | His | Val | Glu | Val | Lys | Glu | Glu | Thr | Pro | Val | Val | Ser | Val | Ser | Tyr |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Asp | His | Asn | Phe | Lys | Val | Lys | Thr | Gln | Ile | Gly | Glu | Phe | Glu | Ser | His |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Ser | Leu | Ile | Ile | Ala | Thr | Gly | Gly | Thr | Ser | Val | Pro | Gln | Thr | Gly | Ser |  |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |  |  |
| Thr | Gly | Asp | Gly | Tyr | Lys | Phe | Ala | Lys | Ser | Leu | Gly | His | Ser | Ile | Thr |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Glu | Leu | Phe | Pro | Thr | Glu | Val | Pro | Ile | Thr | Ser | Ser | Glu | Thr | Phe | Ile |  |  |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |
| Lys | Ser | Asn | Arg | Leu | Lys | Gly | Leu | Ser | Leu | Lys | Asp | Val | Asn | Leu | Ser |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Val | Leu | Lys | Lys | Asn | Gly | Lys | Lys | Arg | Val | Ser | His | Gln | Met | Asp | Met |  |  |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     |     | 240 |  |  |
| Ile | Phe | Thr | His | Phe | Gly | Ile | Ser | Gly | Pro | Ala | Ala | Leu | Arg | Cys | Ser |  |  |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     |     | 255 |  |  |
| Gln | Phe | Val | Tyr | Lys | Glu | Gln | Lys | Asn | Gln | Lys | Lys | Lys | Asn | Ile | His |  |  |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |  |  |
| Met | Gln | Leu | Asp | Val | Phe | Pro | Glu | Leu | Asn | Val | Asp | Gln | Leu | Ser | Gln |  |  |
|     | 275 |     |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |  |
| Lys | Val | Arg | Lys | Ile | Leu | Asn | Ala | Glu | Pro | Asp | Lys | Tyr | Ile | Lys | Asn |  |  |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |  |  |
| Ser | Leu | Arg | Gly | Leu | Ile | Glu | Glu | Arg | Tyr | Leu | Leu | Phe | Ile | Leu | Glu |  |  |
| 305 |     |     |     | 310 |     |     |     |     |     | 315 |     |     |     |     | 320 |  |  |
| Gln | Ser | Gly | Ile | Asn | Asp | Glu | Met | Thr | Ala | His | His | Leu | Ser | Asn | Gln |  |  |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     |     | 335 |  |  |
| Gln | Phe | Gln | Thr | Phe | Ile | Asn | Leu | Leu | Lys | Thr | Phe | Thr | Phe | Thr | Val |  |  |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |  |  |
| Asp | Gly | Thr | Leu | Pro | Leu | Asp | Lys | Ala | Phe | Val | Thr | Gly | Gly | Gly | Ile |  |  |
|     | 355 |     |     |     |     | 360 |     |     |     |     |     | 365 |     |     |     |  |  |
| Ser | Leu | Lys | Glu | Ile | Glu | Pro | Lys | Thr | Met | Met | Ser | Lys | Leu | Val | Pro |  |  |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |  |  |
| Gly | Leu | Phe | Leu | Cys | Gly | Glu | Val | Leu | Asp | Ile | His | Gly | Tyr | Thr | Gly |  |  |
| 385 |     |     |     | 390 |     |     |     |     |     | 395 |     |     |     |     | 400 |  |  |
| Gly | Tyr | Asn | Ile | Thr | Ser | Ala | Leu | Val | Thr | Gly | His | Val | Ala | Gly | Met |  |  |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |  |  |
| Phe | Ala | Gly | Glu | Phe | Lys | Ile | Asp | Gln | Asn | Lys |     |     |     |     |     |  |  |
|     |     |     | 420 |     |     |     | 425 |     |     |     |     |     |     |     |     |  |  |

&lt;210&gt; 6029

&lt;211&gt; 53

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6029

His Thr Leu Leu Arg Asn Asn Phe Ile Thr Val Leu Val Ser Thr Ile  
 1 5 10 15  
 Lys Tyr Leu Val Ile Leu Trp Val Asn Thr Ile Ile Phe Ile Ser Met  
 20 25 30  
 Asn Tyr Lys Tyr Cys Tyr Thr Cys Asn Phe Cys Glu Lys Phe Leu Met  
 35 40 45  
 Tyr Pro Glu Tyr Glu  
 50

<210> 6030

<211> 497

<212> PRT

<213> S.epidermidis

<400> 6030

Ala Gln Leu Leu Ile Phe Asn Lys Gln Val Gly Ile Ile Ile Arg Val  
 1 5 10 15  
 Tyr Asn Leu Glu Glu Cys Ile Val Asn Phe Trp Leu Gln Glu Gln Ala  
 20 25 30  
 Gln Ser Asn Gly Asn Arg Leu Ala Ile Val Thr Asn Gln Leu Ser Leu  
 35 40 45  
 Thr Tyr Glu Glu Leu Tyr His Arg Ala Lys Thr Ile Ala Glu Tyr Leu  
 50 55 60  
 Thr Ser Leu Asn Gln Lys Arg Ile Gly Leu Tyr Ile Ser Asn Asp Ile  
 65 70 75 80  
 Asp Ser Val Val Leu Ile His Ala Cys Trp Leu Ala His Ile Glu Ile  
 85 90 95  
 Ala Met Ile Asn Thr Arg Leu Thr Arg His Glu Met Ile Asn Gln Met  
 100 105 110  
 Asn Ser Val Asp Ile Ala Thr Ile Val His Thr Leu Pro Leu Glu Leu  
 115 120 125  
 Glu Gly Phe Asn Leu Tyr His Phe Asn Asp Leu Thr Gln Leu Asp Lys  
 130 135 140  
 His Asp Val Ser Gly Tyr Lys Phe Asn Leu Glu Ser Ile Ala Ser Ile  
 145 150 155 160  
 Met Phe Thr Ser Gly Thr Thr Gly Pro Gln Lys Ala Val Pro Gln Thr  
 165 170 175  
 Phe Asn Asn His Leu Ala Ser Ala Lys Gly Cys Lys Gln Ser Leu Gly  
 180 185 190  
 Phe Glu Gln Asn Thr Val Trp Leu Ser Val Leu Pro Ile Tyr His Ile  
 195 200 205  
 Ser Gly Leu Ser Val Ile Leu Arg Ala Val Ile Glu Gly Phe Thr Val  
 210 215 220  
 Arg Leu Val Lys Lys Phe Gln Thr Asp Asp Met Leu Thr Gln Ile Lys  
 225 230 235 240  
 Thr Tyr Pro Ile Thr His Met Ser Leu Val Pro Gln Thr Leu Lys Trp  
 245 250 255  
 Leu Met Asp Ala Gly Leu Thr Gln Pro Phe Ser Leu Glu Lys Ile Leu  
 260 265 270  
 Leu Gly Gly Ala Lys Leu Ser Pro Gln Leu Ile Glu Gln Ala Leu Thr  
 275 280 285  
 Tyr Arg Leu Pro Val Tyr Asn Ser Phe Gly Met Thr Glu Thr Cys Ser  
 290 295 300  
 Gln Phe Leu Thr Ala Ser Pro Gln Met Leu Lys Glu Arg Phe Asp Thr  
 305 310 315 320  
 Val Gly Lys Pro Ser Glu Asn Val Glu Val Lys Ile Lys Asn Pro Asn

325 330 335  
 Ala Tyr Gly His Gly Glu Leu Leu Ile Lys Gly Glu Asn Val Met Asn  
 340 345 350  
 Gly Tyr Leu Tyr Pro Lys Tyr Leu Lys Asp Thr Phe Asp Asn Asp Gly  
 355 360 365  
 Tyr Phe Gln Thr Gly Asp Ile Ala Glu Ile Asp Asp Glu Gly Tyr Val  
 370 375 380  
 Ile Ile Tyr Asp Arg Arg Lys Asp Leu Ile Ile Ser Gly Gly Glu Asn  
 385 390 395 400  
 Ile Tyr Pro Tyr Gln Ile Glu Thr Ile Ala Lys Asp Phe Glu Gly Ile  
 405 410 415  
 Glu Asp Ala Val Cys Val Gly Ile Ser Asp Asp Thr Trp Gly Gln Val  
 420 425 430  
 Pro Ile Leu Tyr Tyr Val Thr Asn Gln Asp Ile Asn Gln Thr Glu Leu  
 435 440 445  
 Ile Glu His Phe Glu Asn His Leu Ala Arg Tyr Lys Ile Pro Lys Lys  
 450 455 460  
 Tyr Tyr Gln Val Lys Ser Leu Pro Tyr Thr Ser Thr Gly Lys Leu Gln  
 465 470 475 480  
 Arg Lys Lys Val Lys Ser Glu Asp Leu Asn Glu Gly Lys Asn Asn Glu  
 485 490 495  
 Ser

<210> 6031  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

<400> 6031  
 Leu Thr Ala Leu Ile Ser Leu Asn Gln Ile Glu Lys Ala Ile Asn Ala  
 1 5 10 15  
 His Asp Cys Lys Thr Leu Gln Asp Leu Ser Asn Tyr Phe Asn Leu Pro  
 20 25 30  
 Thr Thr His Leu Phe Leu Thr Met  
 35 40

<210> 6032  
 <211> 490  
 <212> PRT  
 <213> S.epidermidis

<400> 6032  
 Met Tyr Lys Leu Leu Gln His Leu Gly Arg Ser Leu Met Leu Pro Val  
 1 5 10 15  
 Ala Val Leu Pro Ala Ala Ala Ile Ile Val Gly Ile Gly His Val Leu  
 20 25 30  
 Asp Ala Leu Asn Ile Leu Pro Gln Ala Ala Leu Phe Phe Thr Ser Val  
 35 40 45  
 Gly Thr Thr Ile Leu Glu Gln Leu Gly Ile Leu Phe Ala Ile Gly Val  
 50 55 60  
 Ala Ile Gly Met Ala Lys Lys Asn Asp Gly Ala Val Ala Leu Ala Ala  
 65 70 75 80  
 Ala Leu Gly Phe Phe Ile Val Thr Val Val Leu Ser Pro Glu Lys Leu  
 85 90 95  
 Ala Thr Leu Leu Gln Ile Lys Glu Ser Lys Ile Asp Leu Ala Phe Ser



Ile Phe Ser Trp Arg Pro Leu Ser Met Leu Lys Lys Ile Leu Leu Ser  
 1 5 10 15  
 Leu Val Val Phe Tyr Gln Arg Phe Ile Ser Pro Leu Thr Pro Pro Thr  
 20 25 30  
 Cys Arg Phe Tyr Pro Thr Cys Ser Gln Tyr Thr Arg Glu Ala Ile Glu  
 35 40 45  
 Tyr His Gly Ala Leu Lys Gly Leu Tyr Leu Gly Val Arg Arg Ile Leu  
 50 55 60  
 Lys Cys His Pro Leu His Lys Gly Gly Phe Asp Pro Val Pro Leu Lys  
 65 70 75 80  
 Lys Asp Lys Asn Ser Lys Thr Thr His His  
 85 90

<210> 6034

<211> 539

<212> PRT

<213> S.epidermidis

<400> 6034

Leu Asn Leu Trp Arg Leu Leu Asp Met Ser His Lys Ile Leu Val Ser  
 1 5 10 15  
 Asp Pro Ile Ser Glu Asp Gly Leu Gln Ser Ile Leu Lys His Pro Glu  
 20 25 30  
 Phe Asp Val Asp Ile Gln Thr Asp Leu Ser Glu Asn Asp Leu Val Asn  
 35 40 45  
 Met Ile Ser Thr Tyr Asp Ala Leu Ile Val Arg Ser Gln Thr Gln Val  
 50 55 60  
 Thr Glu Arg Ile Ile Asn Ala Ala Thr Asn Leu Lys Val Ile Ala Arg  
 65 70 75 80  
 Ala Gly Val Gly Val Asp Asn Ile Asn Ile Glu Ala Ala Thr Leu Lys  
 85 90 95  
 Gly Ile Leu Val Ile Asn Ala Pro Asp Gly Asn Thr Ile Ser Ala Thr  
 100 105 110  
 Glu His Ser Val Ala Met Leu Leu Ala Met Ala Arg Asn Ile Pro Gln  
 115 120 125  
 Ala His Gln Ser Leu Arg Asn Lys Glu Trp Asn Arg Lys Ala Phe Arg  
 130 135 140  
 Gly Val Glu Leu Tyr Gly Lys Thr Leu Gly Val Ile Gly Ala Gly Arg  
 145 150 155 160  
 Ile Gly Leu Gly Val Ala Lys Arg Ala Gln Ser Phe Gly Met Lys Ile  
 165 170 175  
 Leu Ala Phe Asp Pro Tyr Leu Thr Glu Asp Lys Ala Lys Ser Leu Asp  
 180 185 190  
 Ile Gln Ile Ala Thr Val Asp Glu Ile Ala Glu Lys Ser Asp Phe Val  
 195 200 205  
 Thr Val His Thr Pro Leu Thr Pro Lys Thr Arg Gly Ile Val Gly Ser  
 210 215 220  
 Ser Phe Phe Asn Lys Ala Lys Gln Asn Leu Gln Ile Ile Asn Val Ala  
 225 230 235 240  
 Arg Gly Gly Ile Ile Asp Glu Thr Ala Leu Ile Glu Ala Leu Asp Asn  
 245 250 255  
 Asn Leu Ile Asp Arg Ala Ala Ile Asp Val Phe Glu His Glu Pro Pro  
 260 265 270  
 Thr Asp Ser Pro Leu Ile Gln His Asp Lys Ile Ile Val Thr Pro His  
 275 280 285  
 Leu Gly Ala Ser Thr Val Glu Ala Gln Glu Lys Val Ala Val Ser Val



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      290                      295                      300
Ser Glu Glu Ile Ile Glu Ile Leu Thr Lys Gly Asn Val Glu His Ala
305                      310                      315                      320
Val Asn Ala Pro Lys Met Asp Leu Ser Lys Val Asp Lys Thr Thr Gln
      325                      330                      335
Ser Phe Ile Gly Leu Ser Thr Thr Ile Gly Glu Phe Ala Ile Gln Leu
      340                      345                      350
Leu Asp Gly Ala Pro Ser Glu Ile Lys Val Lys Tyr Ala Gly Asp Leu
      355                      360                      365
Ala Gln Asn Asp Thr Ser Leu Ile Thr Arg Thr Ile Ile Thr Asn Ile
      370                      375                      380
Leu Lys Glu Asp Leu Gly Asn Glu Val Asn Ile Ile Asn Ala Leu Ala
385                      390                      395                      400
Ile Leu Asn Gln Gln Gly Val Thr Tyr Asn Ile Glu Lys Gln Lys Lys
      405                      410                      415
His Ser Gly Phe Ser Ser Tyr Ile Glu Leu Glu Leu Val Asn Asp Gln
      420                      425                      430
Asp Lys Ile Lys Ile Gly Ala Thr Val Phe Ala Gly Phe Gly Pro Arg
      435                      440                      445
Ile Val Arg Ile Asn Asp Tyr Ser Leu Asp Phe Lys Pro Asn Gln Tyr
      450                      455                      460
Gln Leu Val Thr Cys His Lys Asp Lys Pro Gly Ile Val Gly Gln Thr
465                      470                      475                      480
Gly Asn Leu Leu Gly Ser His Gly Ile Asn Ile Ala Ser Met Thr Leu
      485                      490                      495
Gly Arg Asn Asp Ala Gly Gly Asp Ala Leu Met Ile Leu Ser Ile Asp
      500                      505                      510
Gln Gln Ala Ser Glu Glu Val Ile Lys Ile Leu Asn Glu Thr Ser Gly
      515                      520                      525
Phe Asn Lys Ile Ile Ser Thr Lys Leu Thr Ile
      530                      535

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&lt;210&gt; 6035

&lt;211&gt; 395

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6035

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Ile Leu Leu Trp Glu Glu Cys Thr Met Gln Tyr Tyr Gln Pro Leu Leu
1      5      10      15
Leu Thr Pro Gly Pro Thr Pro Val Pro Glu Gln Ile Leu Ser Ala Val
      20      25      30
Gln Leu Pro Met Val Gly His Arg Ser Thr Asp Phe Glu Glu Ile Ala
      35      40      45
Ser Glu Ala Phe Lys Gly Leu Lys Pro Val Phe Gly Ser Lys Asn Glu
      50      55      60
Val Leu Ile Leu Thr Ser Ser Gly Thr Ser Val Leu Glu Ala Ser Met
      65      70      75      80
Leu Asn Ile Ala Asn Pro Asp Asp His Ile Val Ile Ile Val Ser Gly
      85      90      95
Ala Phe Gly Asn Arg Phe Lys Gln Ile Ala Gln Thr Tyr Tyr Asn His
      100      105      110
Val His Val Tyr Asp Val Asn Trp Gly Glu Ala Val Ile Val Asp Asp
      115      120      125
Phe Ile Thr Tyr Leu Lys Gln Leu Asn Val Pro Val Thr Ala Val Phe
      130      135      140

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Thr Gln Phe Cys Glu Thr Ser Thr Gly Val Ile His Pro Val His Gln
145          150          155          160
Leu Gly His Ala Leu Lys Ala Phe Asp Asn Ser Leu Tyr Phe Ile Val
          165          170          175
Asp Gly Val Ser Cys Ile Gly Ala Val Asp Val Asp Leu Thr Lys Asp
          180          185          190
Lys Ile Asp Val Leu Val Ser Gly Ser Gln Lys Ala Ile Met Leu Pro
          195          200          205
Pro Gly Leu Ala Phe Val Ala Tyr Ser Asp Arg Ala Lys Lys Arg Phe
          210          215          220
Ala Asp Val Lys Thr Pro Arg Phe Tyr Leu Asp Leu Asn Lys Tyr Ile
225          230          235          240
Lys Ser Gln Glu Gln Asn Ser Thr Pro Phe Thr Pro Asn Val Gly Leu
          245          250          255
Phe Arg Gly Ile Asn Ala Tyr Val Glu Leu Val Lys Lys Glu Gly Leu
          260          265          270
Asn His Val Ile Ser Arg His Phe Lys Ile Arg Asn Ala Leu Arg Ala
          275          280          285
Ala Leu Lys Ala Leu Glu Leu Glu Leu Leu Val Lys Asp Asp Ala His
          290          295          300
Ala Ser Pro Thr Val Thr Ser Phe Val Pro Lys Asn Gln Glu Glu Leu
305          310          315          320
Asn Ile Ile Lys Asn Gln Leu Lys Ser Gln Phe Asn Ile Thr Ile Ala
          325          330          335
Gly Gly Gln Gly His Leu Lys Gly Gln Ile Leu Arg Ile Gly His Met
          340          345          350
Gly Lys Ile Ser Pro Phe Asp Ile Leu Ala Val Val Ser Ala Leu Glu
          355          360          365
Ile Ile Leu Thr Ser Asn Arg Asn Val Asn Tyr Ile Gly Thr Gly Ile
          370          375          380
Thr Gln Phe Met Glu Val Ile Arg His Glu Ser
385          390          395

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&lt;210&gt; 6036

&lt;211&gt; 388

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6036

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Asn Ser Ile Cys Asn Phe Lys Lys Val Ala Lys Leu Met Asn Asn Lys
1          5          10          15
Leu Lys Lys Glu Ile Ile Asp Phe Ala His Ser Ile Gly Ile Asp Ser
          20          25          30
Ile Gly Phe Thr Thr Ala Asp Pro Phe Asp Glu Leu Lys Gln Lys Leu
          35          40          45
Glu Glu Tyr His Ala Lys Gly Tyr Ala Ser Gly Phe Glu Glu Ser Asn
          50          55          60
Ile Ser Leu Arg Thr Glu Pro Lys Leu Ser Leu Pro Ser Ala Arg Ser
65          70          75          80
Ile Ile Ala Ile Ala Val Gly Tyr Pro Asn Lys Leu Lys Gly Ala Pro
          85          90          95
Lys Ser Val Lys Gly Asp Arg Arg Gly Met Phe Ala Arg Ala Ser Trp
          100          105          110
Gly Gln Asp Tyr His Ser Ile Met Arg Lys Arg Leu Asp Lys Leu Ala
          115          120          125
Asp Phe Ile Lys Glu Lys Val Pro Asp Val Glu Ile Gln Ser Met Val

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130 135 140  
 Asp Thr Gly Val Leu Ser Asp Arg Ala Val Ala Glu Arg Ala Gly Leu  
 145 150 155 160  
 Gly Phe Thr Gly Arg Asn Gly Phe Val Ile Ser Pro Glu Leu Gly Thr  
 165 170 175  
 Trp Ser Tyr Leu Gly Glu Met Leu Val Ser Ile Pro Phe Glu Pro Asp  
 180 185 190  
 Asp Pro Leu Leu Asp Ser Cys Gly Asp Cys Thr Ile Cys Val Asp Arg  
 195 200 205  
 Cys Pro Thr Gly Ala Leu Val Gly Asn Gly Gln Leu Asn Ser Gln Lys  
 210 215 220  
 Cys Ile Ser Phe Leu Thr Gln Thr Lys Gly Tyr Leu Gln Asp Glu Tyr  
 225 230 235 240  
 Arg Tyr Lys Ile Gly Asn Arg Leu Tyr Gly Cys Asp Thr Cys Gln Gln  
 245 250 255  
 Val Cys Pro Lys Asn Arg Gly Ile Asn Thr Gln His Asp Asp Ile Val  
 260 265 270  
 Leu Glu Pro Glu Ile Leu Lys Pro Arg Leu Val Pro Leu Leu Gln Met  
 275 280 285  
 Ser Asn Lys Lys Phe Lys Ser Thr Tyr Gly His Leu Ala Gly Ala Trp  
 290 295 300  
 Arg Gly Lys Lys Pro Ile Gln Arg Asn Ala Ile Ile Ala Leu Ala His  
 305 310 315 320  
 Phe Lys Glu Glu Ser Ala Ile Pro Glu Leu Lys Glu Val Ala Leu Asn  
 325 330 335  
 Asp Pro Arg Pro Met Ile Arg Gly Thr Ala Tyr Trp Ala Ile Gly Gln  
 340 345 350  
 Ile Leu Glu Asp Asp Ala Ile Ser Phe Ile Asp Glu His Tyr Glu Asn  
 355 360 365  
 Glu Ile Glu Glu Val Gln Leu Glu Met Lys Lys Gly Leu Gln Met Arg  
 370 375 380  
 Arg Glu Gln Lys  
 385

&lt;210&gt; 6037

&lt;211&gt; 322

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6037

Lys Gly Lys Cys Ile Met Gly Asn Tyr Phe Pro Tyr Ala Phe Glu Asp  
 1 5 10 15  
 Lys Arg Tyr His Thr Trp Asn Tyr His Leu Lys Asn Lys Phe Gly Gln  
 20 25 30  
 Lys Ile Phe Lys Val Ala Leu Asp Gly Gly Phe Asp Cys Pro Asn Arg  
 35 40 45  
 Asp Gly Thr Val Ala His Gly Gly Cys Thr Phe Cys Ser Ala Ala Gly  
 50 55 60  
 Ser Gly Asp Phe Ala Gly Asn Arg Ala Glu Pro Ile Glu Val Gln Phe  
 65 70 75 80  
 Lys Lys Ile Lys Glu Arg Met His Glu Lys Trp Ser Glu Gly Gln Tyr  
 85 90 95  
 Ile Ala Tyr Phe Gln Ala Phe Thr Asn Thr His Ala Pro Val Glu Val  
 100 105 110  
 Leu Lys Glu Lys Tyr Glu Pro Val Leu Lys Glu Asp Gly Val Val Gly  
 115 120 125

Leu Ser Ile Ala Thr Arg Pro Asp Cys Leu Pro Asp Asp Val Val Glu  
 130 135 140  
 Tyr Leu Ala Glu Leu Asn Gln Arg Thr Tyr Leu Trp Val Glu Leu Gly  
 145 150 155 160  
 Leu Gln Thr Val His Gln Ser Thr Ser Asp Leu Ile Asn Arg Ala His  
 165 170 175  
 Asp Met Gln Thr Tyr Tyr Asp Gly Val Thr Lys Leu Arg Lys His Asn  
 180 185 190  
 Ile Asn Val Cys Thr His Ile Ile Asn Gly Leu Pro Gly Glu Asn Tyr  
 195 200 205  
 Asp Met Met Met Glu Thr Ala Lys Glu Val Ala Gln Met Asp Val Gln  
 210 215 220  
 Gly Ile Lys Ile His Leu Leu His Leu Leu Lys Gly Thr Pro Met Val  
 225 230 235 240  
 Lys Gln Tyr Glu Lys Gly Met Leu Glu Phe Met Ser Gln Gln Asp Tyr  
 245 250 255  
 Thr Asn Leu Val Cys Asp Gln Leu Glu Val Leu Pro Pro Glu Met Ile  
 260 265 270  
 Val His Arg Ile Thr Gly Asp Gly Pro Ile Asp Leu Met Val Gly Pro  
 275 280 285  
 Met Trp Ser Val Asn Lys Trp Glu Val Leu Asn Glu Ile Asp Asn Glu  
 290 295 300  
 Leu Ala Arg Arg Asn Ser Tyr Gln Gly Lys Met Asn Lys Gln Ser Ile  
 305 310 315 320  
 Gln Ser

<210> 6038

<211> 471

<212> PRT

<213> S.epidermidis

<400> 6038

Ser Arg Met Trp Lys Glu Lys Val Leu Glu Tyr Glu Asn Gln Met Ile  
 1 5 10 15  
 Glu Asp Leu Lys Gly Leu Leu Ser Ile Glu Ser Ile Arg Asp Asp Ser  
 20 25 30  
 Lys Ala Thr Ala Asp Ala Pro Val Gly Pro Gly Pro Arg Glu Ala Leu  
 35 40 45  
 Asp Tyr Met Tyr Asn Leu Gly Lys Arg Asp Gly Phe Ser Thr His Asp  
 50 55 60  
 Val Asp His Ile Ala Gly Arg Ile Glu Ala Gly Lys Gly Glu Asp Val  
 65 70 75 80  
 Leu Gly Ile Leu Cys His Val Asp Val Val Pro Ala Gly Asp Gly Trp  
 85 90 95  
 Asp Ser Asn Pro Phe Gln Pro Val Val Thr Asp Asn Ala Ile Ile Ala  
 100 105 110  
 Arg Gly Thr Leu Asp Asp Lys Gly Pro Thr Ile Ala Ala Tyr Tyr Ala  
 115 120 125  
 Val Lys Ile Leu Asn Glu Met Lys Val Asp Trp Lys Lys Arg Ile His  
 130 135 140  
 Ile Ile Ile Gly Thr Asp Glu Glu Ser Asp Trp Lys Cys Thr Asp Arg  
 145 150 155 160  
 Tyr Phe Lys Thr Glu Glu Met Pro Thr Leu Gly Phe Ala Pro Asp Ala  
 165 170 175  
 Glu Phe Pro Ala Ile His Gly Glu Lys Gly Ile Thr Thr Phe Asp Leu

180 185 190  
 Val Gln Asn Glu Val Thr Glu Asp Thr Asp Glu Pro Asp Tyr Glu Leu  
 195 200 205  
 Leu Lys Phe Glu Ser Gly Gln Arg Tyr Asn Met Val Pro Asp Tyr Ala  
 210 215 220  
 Lys Ala Glu Val Leu Val Lys Glu Asn Met Thr Asp Val Ile Gln Asn  
 225 230 235 240  
 Phe Glu Asn Phe Leu Gln Gln Asn Gln Leu Gln Gly Glu Ser Thr Val  
 245 250 255  
 Asp Ser Gly Ile Leu Ile Leu Thr Ile Glu Gly Lys Ala Val His Gly  
 260 265 270  
 Met Asp Pro Ser Leu Gly Val Asn Ala Gly Leu Phe Leu Lys Phe  
 275 280 285  
 Leu Ala Ser Leu Asn Leu Asn Lys Ser Ala Lys Asp Phe Val Glu Phe  
 290 295 300  
 Asn Glu Arg Tyr Leu Phe Glu Ser His Phe Gly Glu Lys Met Gly Met  
 305 310 315 320  
 Lys Phe His Thr Asp Ile Met Gly Asp Val Thr Thr Asn Ile Gly Val  
 325 330 335  
 Ile Ser Tyr Asp Lys Glu Lys Ala Gly Ser Tyr Gly Ile Asn Leu Arg  
 340 345 350  
 Tyr Pro Glu Gly Phe Lys Phe Glu Asp Ala Ile Asp Arg Phe Arg Ser  
 355 360 365  
 Glu Ile Asn Glu Leu Gly Phe Asn Leu Glu Leu Gly Lys Val Gln Lys  
 370 375 380  
 Pro His Tyr Val Asp Lys Asn Asp Pro Phe Val Lys Thr Leu Val Asn  
 385 390 395 400  
 Ala Tyr Arg Asn Gln Thr Gly Asp Met Thr Glu Pro Tyr Thr Ile Gly  
 405 410 415  
 Gly Gly Thr Tyr Ala Arg Asn Leu Asp Lys Gly Val Ala Phe Gly Ala  
 420 425 430  
 Met Phe Ala Asp Ser Glu Asp Leu Met His Gln Lys Asn Glu Tyr Ile  
 435 440 445  
 Thr Lys Lys Gln Leu Ile Asn Ala Thr Ser Ile Tyr Leu Glu Ala Ile  
 450 455 460  
 Tyr Ala Leu Cys Val Glu Asp  
 465 470

&lt;210&gt; 6039

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6039

Gly Ile Phe Arg Ala Ile Ala Ser Asn Ile Ala Thr Glu Cys Ser Val  
 1 5 10 15  
 Ala Glu Ile Val Leu Pro Ser Gly Ala Leu Ile Thr Lys Ile Pro Phe  
 20 25 30  
 Lys Val Ala Ala Ser Ile Leu Ile Leu Ser Thr Pro Thr Pro Ala Leu  
 35 40 45  
 Ala Met Thr Phe Lys Phe Val Ala Ala Leu Ile Ile Arg Ser Val Thr  
 50 55 60  
 Trp Val  
 65

&lt;210&gt; 6040

<211> 62  
 <212> PRT  
 <213> S.epidermidis

<400> 6040  
 Ser Ile Leu Leu Phe Glu Lys Ile Pro Leu Leu His Glu Glu Ala Ala  
 1 5 10 15  
 Ala Val Lys Thr Thr Lys Leu Ile Ile Pro Ala Ala Asn Gly Ile Pro  
 20 25 30  
 Ile Asn Ala Asn Asn Leu Thr Asn Gly Leu Leu Ser Gly Ser Thr Leu  
 35 40 45  
 Ser His Gly Ile Met Asp Met Met Thr Ala Asn Ala Pro Thr  
 50 55 60

<210> 6041  
 <211> 67  
 <212> PRT  
 <213> S.epidermidis

<400> 6041  
 Pro Glu Gly Arg Trp Phe Lys Ser Ala Ser Arg Asn Thr Cys Phe Ile  
 1 5 10 15  
 Arg Ser Arg Ser Val Ala Val Asn Thr Pro Ala Cys His Ala Gly Asp  
 20 25 30  
 Arg Gly Phe Asp Ser Arg Arg Asp Arg His Tyr Asn Tyr Gly Ser Val  
 35 40 45  
 Ala Gln Leu Val Glu Gln Trp Ile Glu Ala Pro Cys Val Gly Ser Ser  
 50 55 60  
 Thr Leu Ser  
 65

<210> 6042  
 <211> 74  
 <212> PRT  
 <213> S.epidermidis

<400> 6042  
 Ile Gly Met Leu Leu Tyr Asn Tyr Val Pro Gln Asn Lys Trp Ser Gln  
 1 5 10 15  
 Trp Phe Lys Thr Tyr Gly Val Glu Glu Ser Val Asn Leu Asn Lys Arg  
 20 25 30  
 Met Lys Trp Tyr Thr Val Ile Gln Ala Ile Gly Leu Ile Gln Trp Tyr  
 35 40 45  
 Glu Glu Gln Lys Arg Tyr Arg Asp Met Asn Thr Trp Leu Lys Phe Leu  
 50 55 60  
 Asn Glu Val Met Asn Ser Asn Leu Phe Ile  
 65 70

<210> 6043  
 <211> 323  
 <212> PRT  
 <213> S.epidermidis

<400> 6043  
 Ile Ile Phe Arg Ser Leu Lys Gly Val Ile Asn Met Glu Val Lys Met  
 1 5 10 15

Asn Glu Ile Met Glu Ala Leu Glu Gln Ser Glu Leu Ile Ile Ile His  
 20 25 30  
 Arg His Leu Arg Pro Asp Pro Asp Ala Tyr Gly Ser Gln Leu Gly Leu  
 35 40 45  
 Lys Tyr Tyr Leu Gln Lys Lys Phe Pro Asn Lys Gln Ile Tyr Ala Val  
 50 55 60  
 Gly Ala Asn Glu Asp Ser Leu Lys Phe Ile Gly Leu Met Asp Glu Ile  
 65 70 75 80  
 Asp Asp Asp Met Tyr Lys Lys Ala Thr Val Val Val Cys Asp Thr Ala  
 85 90 95  
 Asn Ala Pro Arg Ile Asp Asp Gln Arg Tyr Asp Thr Gly Thr Lys Leu  
 100 105 110  
 Leu Lys Ile Asp His His Pro Ala Thr Asp Gln Tyr Gly Asp Ile Asn  
 115 120 125  
 Tyr Val Asn Thr Lys Ala Ser Ser Thr Ser Glu Ile Ile Tyr Glu Phe  
 130 135 140  
 Ile Leu His Phe Asn Asp Glu His Ile Ile Asp Glu Gln Val Ala Arg  
 145 150 155 160  
 Val Leu Tyr Leu Gly Ile Val Gly Asp Thr Gly Arg Phe Leu Phe Asn  
 165 170 175  
 Asn Thr Thr Pro Arg Thr Met Gln Ile Thr Gly Lys Leu Leu Thr Tyr  
 180 185 190  
 Pro Phe Asp His Asn Gln Glu Leu Asn Lys Met Ser Glu Lys Asp Pro  
 195 200 205  
 Lys Leu Leu Pro Phe Gln Gly Tyr Ile Leu Gln Asn Phe Asp Leu Asn  
 210 215 220  
 Asp Lys Gly Phe Cys Lys Val Lys Ile Thr Lys Asp Ile Leu Glu Lys  
 225 230 235 240  
 Phe Gln Ile Gln Pro Asn Glu Ala Ser Leu Phe Val Asn Thr Ile Ala  
 245 250 255  
 Asp Ile Arg Gly Leu Lys Ile Trp Met Phe Gly Val Asp Glu Gly Asp  
 260 265 270  
 Gln Ile Arg Cys Arg Leu Arg Ser Lys Gly His Ile Ile Ile Asn Asp  
 275 280 285  
 Val Ala Asn Thr Phe Gly Gly Gly Gly His Pro Asn Ala Ser Gly Val  
 290 295 300  
 Ser Val Asn Ser Trp Glu Gln Phe Glu Gln Leu Ala Glu Ala Leu Asn  
 305 310 315 320  
 Asp Lys Leu

<210> 6044

<211> 109

<212> PRT

<213> S.epidermidis

<400> 6044

Cys Leu Ser Arg Arg Gln Phe Met Ala Arg Ser Lys Lys Tyr Phe Tyr  
 1 5 10 15  
 Leu Ser Leu Leu Met Ile Ile Leu Ser Phe Phe Phe Asn Thr Asn Asn  
 20 25 30  
 Ser Leu Leu Ser Asn Ile Phe Gln Ser Phe Met Lys Ile Val Val Val  
 35 40 45  
 Thr Ser Ile Val Asn Ile Ile Ile Leu Ile Leu Ser Ile Val Phe Ala  
 50 55 60  
 Asp Lys Ser Ile Lys Tyr Ala Lys Glu Ser Ser Asp Trp Ile Arg Phe

CCCTT=6044





Lys Gln His Leu Leu Lys Gln Ser Lys Asp Glu  
130 135

<210> 6048

<211> 461

<212> PRT

<213> S.epidermidis

<400> 6048

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Ser | Val | Arg | Ile | Glu | His | Asp | Thr | Phe | Gly | Glu | Ile | Glu | Val | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu | Asp | Lys | Tyr | Trp | Gly | Ala | Gln | Thr | Glu | Arg | Ser | Lys | Arg | Asn | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Val | Gly | Lys | Glu | His | Met | Pro | Ile | Gln | Val | Ile | Tyr | Gly | Phe | Ala |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gln | Leu | Lys | Arg | Gly | Ala | Ala | Leu | Ala | Asn | His | Glu | Leu | Gly | Lys | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Asp | Glu | Lys | Lys | Asn | Ala | Ile | Val | Tyr | Ala | Cys | Asp | Arg | Ile | Leu |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |
| Asn | Gly | Glu | Leu | Asp | Asn | His | Phe | Pro | Leu | Val | Ile | Trp | Gln | Thr | Gly |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Ser | Gly | Thr | Gln | Ser | Asn | Met | Asn | Val | Asn | Glu | Val | Val | Ser | Tyr | Val |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Asn | Glu | Tyr | Leu | Lys | Lys | His | Gly | Ser | Lys | Glu | Thr | Ile | His | Pro |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asn | Asp | Asp | Val | Asn | Lys | Ser | Gln | Ser | Ser | Asn | Asp | Thr | Phe | Pro | Thr |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ala | Met | His | Val | Ala | Leu | Phe | His | Glu | Val | Glu | Thr | Lys | Leu | Glu | Pro |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ala | Leu | Asn | His | Leu | Arg | Gln | Thr | Phe | Lys | Glu | Lys | Glu | Asp | Gln | Tyr |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Gln | Ser | Ile | Ile | Lys | Ile | Gly | Arg | Thr | His | Leu | Gln | Asp | Ala | Thr | Pro |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ile | Lys | Leu | Gly | Gln | Glu | Ile | Ser | Gly | Trp | Arg | Tyr | Met | Leu | Glu | Lys |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Cys | Glu | Gln | Leu | Leu | Ser | Glu | Ser | Lys | Lys | His | Ile | Leu | Asn | Leu | Ala |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ile | Gly | Gly | Thr | Ala | Val | Gly | Thr | Gly | Ile | Asn | Ala | His | Pro | Glu | Phe |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Gly | His | Lys | Val | Ala | Lys | Tyr | Ile | Ser | Gln | Asn | Thr | Gly | Tyr | Ala | Phe |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Val | Ser | Ser | Glu | Asn | Lys | Phe | His | Ala | Leu | Thr | Ser | His | Asp | Glu | Ile |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Val | Gln | Leu | His | Gly | Thr | Leu | Lys | Ala | Leu | Ala | Thr | Asp | Leu | Met | Lys |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Ile | Ala | Asn | Asp | Ile | Arg | Trp | Leu | Ala | Ser | Gly | Pro | Arg | Ala | Gly | Leu |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Ala | Glu | Ile | Ser | Ile | Pro | Glu | Asn | Glu | Pro | Gly | Ser | Ser | Ile | Met | Pro |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Gly | Lys | Val | Asn | Pro | Thr | Gln | Cys | Glu | Met | Leu | Thr | Met | Val | Ala | Val |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Gln | Val | Met | Gly | Asn | Asp | Thr | Thr | Val | Gly | Ile | Ala | Ser | Ser | Gln | Gly |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Asn | Phe | Glu | Leu | Asn | Val | Phe | Lys | Pro | Val | Ile | Met | His | Asn | Thr | Leu |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Gln | Ser | Ile | Tyr | Leu | Leu | Ala | Asp | Gly | Met | Asn | Thr | Phe | Asn | Lys | Asn |

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      370                      375                      380
Cys Ala Ile Gly Ile Gln Pro Ile Glu Glu Asn Ile Asn Asn Tyr Leu
385                      390                      395                      400
Asn Gln Ser Leu Met Leu Val Thr Ala Leu Asn Pro His Ile Gly Tyr
      405                      410                      415
Glu Lys Ala Ala Gln Ile Ala Lys Lys Ala His Lys Glu Gly Leu Thr
      420                      425                      430
Leu Lys Glu Ser Ala Ile Glu Ser Gly Tyr Val Thr Glu Ser Gln Phe
      435                      440                      445
Glu Glu Trp Ile Lys Pro Glu Asp Met Val Asp Pro His
      450                      455                      460

```

<210> 6049  
 <211> 68  
 <212> PRT  
 <213> S.epidermidis

```

<400> 6049
Asn Leu Val Arg Lys Ser Leu Leu Gln Lys Val Gly Ala Val Met Pro
1                      5                      10                      15
Ser Gly Met Val Ile Lys Asp Ala Gln Leu Arg Gly Val Asp Ser Ser
      20                      25                      30
Gly Met Ile Cys Ser Met Lys Glu Leu Asn Leu Pro Asn Ala Pro Lys
      35                      40                      45
Glu Lys Arg Asn Tyr Gly Thr Leu Thr Met Thr Met Ile Leu Gly Gln
      50                      55                      60
Ala Ile Phe Glu
65

```

<210> 6050  
 <211> 209  
 <212> PRT  
 <213> S.epidermidis

```

<400> 6050
Asn Ile Trp Leu Thr Lys Asn Tyr Phe Leu Ser His Phe Leu Val Glu
1                      5                      10                      15
Ser Glu Val Asn Val Leu Glu Gln Phe Tyr Gln Leu Gly Trp Thr Leu
      20                      25                      30
Asp Ser Ala Gly Gly Ala Ser Gly Glu Ala Tyr Met Ala Glu Gln Asp
      35                      40                      45
Gly Gln Lys Leu Phe Leu Lys Arg Asn Ser Asn Pro Phe Ile Ala Ala
      50                      55                      60
Leu Ser Ala Glu Gly Ile Val Pro Lys Leu Val Trp Thr Lys Arg Ile
65                      70                      75                      80
Glu Thr Gly Glu Val Val Thr Ala Gln His Trp Lys Asn Gly Arg Glu
      85                      90                      95
Leu Asn Glu Asp Glu Met Asn Gln Thr Arg Val Ala Glu Leu Leu His
      100                      105                      110
Lys Ile His Gly Ser Arg Pro Leu Leu Thr Met Leu Lys Arg Met Glu
      115                      120                      125
Met Glu Pro Ile Thr Pro Asp Ile Met Leu Asn Lys Ile Asn Ala Ser
      130                      135                      140
Leu Ser Arg Glu Val Leu Thr His His Val Val Arg Arg Ala Leu Thr
145                      150                      155                      160
Tyr Leu Glu Asp His Leu Pro Asn Leu Glu Pro Arg Phe Phe Thr Val

```

2633

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Val | His | Gly | Arg | Val | Lys | His | Asn | Asn | Trp | Leu | Leu | Ser | Glu | Ser | Asp |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Glu | Leu | Tyr | Leu | Val | Asp | Trp | Gly | Arg | Cys | Met | Ile | Ala | Lys | Pro | Ala |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |

Asn

<210> 6051  
 <211> 42  
 <212> PRT  
 <213> S.epidermidis

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Lys | Arg | Asn | Ser | Ser | Lys | Thr | Leu | Ser | Phe | Cys | Phe | Phe | Ser | Val | Met |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Arg | Leu | Tyr | Tyr | Asn | Tyr | Asn | Ser | Phe | Gly | Asn | Phe | His | Ser | Lys | Tyr |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Gly | Gly | Cys | Arg | Phe | Leu | Ile | Gln | Gln | Thr |     |     |     |     |     |     |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |  |  |

<210> 6052  
 <211> 77  
 <212> PRT  
 <213> S.epidermidis

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Asn | Ile | Cys | Ser | Ile | Phe | Cys | Tyr | Phe | Phe | Thr | Ile | Ile | Lys | Tyr | Phe |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Lys | Ile | His | Cys | His | Val | Asn | Tyr | Thr | Pro | Leu | Ser | Leu | Leu | Phe | Tyr |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Leu | Ser | Arg | Phe | Asn | Leu | Lys | Tyr | Thr | Leu | Cys | Ile | Asn | Tyr | Gln | Thr |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Ile | Ile | Phe | Tyr | Trp | Leu | Thr | Ile | Asn | Ile | Thr | Phe | Leu | Gly | Phe | Ile |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Leu | His | Leu | Leu | Tyr | Leu | Leu | Ala | Leu | Ile | Met | Lys | Gly |     |     |     |  |  |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     |     |  |  |

<210> 6053  
 <211> 409  
 <212> PRT  
 <213> S.epidermidis

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| Met | Ser | Leu | Arg | Asp | Asp | Ala | Leu | Glu | Met | His | Arg | Glu | Asn | Gln | Gly |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Lys | Leu | Glu | Ile | Thr | Pro | Asn | Val | Lys | Val | Thr | Asn | Lys | Gln | Gln | Leu |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Ser | Leu | Ala | Tyr | Ser | Pro | Gly | Val | Ala | Glu | Pro | Cys | Lys | Glu | Ile | His |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Glu | Asp | Ser | Arg | Lys | Val | Tyr | Glu | Tyr | Thr | Ile | Lys | Gly | Asn | Thr | Val |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Ala | Val | Val | Thr | Asp | Gly | Thr | Ala | Val | Leu | Gly | Leu | Gly | Asn | Ile | Gly |  |  |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |  |  |
| Ala | Glu | Ala | Ser | Ile | Pro | Val | Met | Glu | Gly | Lys | Ala | Ala | Leu | Phe | Lys |  |  |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |

6051 6052 6053

Ser Phe Ala Gly Ile Asn Gly Val Pro Ile Ser Leu Asp Thr Thr Asp  
 100 105 110  
 Thr Gln Glu Ile Ile Lys Thr Val Lys Leu Ile Ala Pro Asn Tyr Gly  
 115 120 125  
 Gly Ile Asn Leu Glu Asp Ile Ser Ala Pro Arg Cys Phe Glu Ile Glu  
 130 135 140  
 Glu Thr Leu Lys Lys Glu Thr Asn Ile Pro Ile Phe His Asp Asp Gln  
 145 150 155 160  
 His Gly Thr Ala Ile Val Thr Met Ala Gly Leu Ile Asn Ala Leu Lys  
 165 170 175  
 Ile Val Asp Lys Glu Leu Thr Asn Ile Lys Val Val Leu Asn Gly Ala  
 180 185 190  
 Gly Ala Ala Gly Ile Ala Ile Val Lys Leu Leu His Ala Tyr Gly Val  
 195 200 205  
 Asn Asn Met Ile Met Cys Asp Ser Lys Gly Ala Ile Tyr Ser Gly Arg  
 210 215 220  
 Asn Phe Gly Met Asn Asp Thr Lys Thr Tyr Val Ala Lys Trp Thr Asn  
 225 230 235 240  
 Lys Asp Lys Val Glu Gly Ser Leu Glu Glu Val Ile Lys Asp Ala Asp  
 245 250 255  
 Val Phe Ile Gly Val Ser Val Ala Asp Ile Leu Thr Gln Asp Met Val  
 260 265 270  
 Lys Thr Met Ala Asp Asp Pro Ile Ile Phe Ala Met Ala Asn Pro Asn  
 275 280 285  
 Pro Glu Ile Asn Pro Asn Glu Ala Lys Gln Ala Gly Ala Lys Val Val  
 290 295 300  
 Gly Thr Gly Arg Ser Asp Phe Pro Asn Gln Ile Asn Asn Val Leu Ala  
 305 310 315 320  
 Phe Pro Gly Leu Phe Arg Gly Ala Leu Asp Val Glu Ala Thr His Ile  
 325 330 335  
 Asn Glu Asp Met Lys Lys Ala Ala Val Glu Ala Ile Val His Leu Ile  
 340 345 350  
 Asp Glu Asn Glu Leu His Pro Asp Tyr Cys Ile Pro Gly Pro Phe Asp  
 355 360 365  
 Lys Arg Val Ala Pro Ser Val Ala Lys Asn Val Ala Lys Ala Ala Met  
 370 375 380  
 Glu Ser Gly Val Ala Arg Ile Lys Ile Asp Thr Gln Glu Ile Phe Asp  
 385 390 395 400  
 Lys Thr Met Lys Leu Thr Asp Leu Lys  
 405

<210> 6054

<211> 601

<212> PRT

<213> S.epidermidis

<400> 6054

Ile Ser Lys Arg Ile Ile Asn Leu Asn Leu Phe Gly Arg Ile Ile Lys  
 1 5 10 15  
 Met Arg Lys Thr Lys Ile Val Cys Thr Ile Gly Pro Ala Ser Glu Ser  
 20 25 30  
 Glu Glu Met Leu Glu Lys Leu Met Asn Ala Gly Met Asn Val Ala Arg  
 35 40 45  
 Leu Asn Phe Ser His Gly Ser His Glu Glu His Lys Ala Arg Ile Asp  
 50 55 60  
 Thr Ile Arg Lys Val Ala Lys Arg Leu Asn Lys Thr Ile Gly Leu Leu

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Leu | Asp | Thr | Lys | Gly | Pro | Glu | Ile | Arg | Thr | His | Asn | Met | Lys | Asp | Gly |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Ile | Val | Leu | Glu | Lys | Gly | Lys | Glu | Val | Ile | Val | Ser | Met | Asn | Glu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Glu | Gly | Thr | Pro | Glu | Lys | Phe | Ser | Val | Thr | Tyr | Glu | Asn | Leu | Ile |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asn | Asp | Val | Asn | Ile | Gly | Ser | Tyr | Ile | Leu | Leu | Asp | Asp | Gly | Leu | Val |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Glu | Leu | Gln | Val | Lys | Glu | Ile | Asn | Lys | Asp | Lys | Gly | Glu | Val | Lys | Cys |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Asp | Ile | Leu | Asn | Thr | Gly | Glu | Leu | Lys | Asn | Lys | Lys | Gly | Val | Asn | Leu |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Pro | Gly | Val | Lys | Val | Asn | Leu | Pro | Gly | Ile | Thr | Asp | Lys | Asp | Ala | Asp |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Asp | Ile | Arg | Phe | Gly | Ile | Lys | Glu | Asn | Val | Asp | Phe | Ile | Ala | Ala | Ser |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Phe | Val | Arg | Arg | Pro | Ser | Asp | Val | Leu | Asp | Ile | Arg | Gln | Ile | Leu | Glu |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Glu | Glu | Lys | Ala | Glu | Ile | Thr | Ile | Phe | Pro | Lys | Ile | Glu | Asn | Gln | Glu |
| 225 |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |     |
| Gly | Ile | Asp | Asn | Ile | Glu | Glu | Ile | Leu | Glu | Val | Ser | Asp | Gly | Leu | Met |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Val | Ala | Arg | Gly | Asp | Met | Gly | Val | Glu | Ile | Pro | Pro | Glu | Ser | Val | Pro |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Met | Val | Gln | Lys | Asp | Leu | Ile | Arg | Lys | Cys | Asn | Lys | Leu | Gly | Lys | Pro |
|     | 275 |     |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Val | Ile | Thr | Ala | Thr | Gln | Met | Leu | Asp | Ser | Met | Gln | Arg | Asn | Pro | Arg |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Ala | Thr | Arg | Ala | Glu | Ala | Ser | Asp | Val | Ala | Asn | Ala | Ile | Tyr | Asp | Gly |
| 305 |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |     |
| Thr | Asp | Ala | Val | Met | Leu | Ser | Gly | Glu | Thr | Ala | Ala | Gly | Gln | Tyr | Pro |
|     |     |     | 325 |     |     |     |     | 330 |     |     |     |     |     | 335 |     |
| Glu | Glu | Ala | Val | Lys | Thr | Met | Arg | Asn | Ile | Ala | Val | Ser | Ala | Glu | Ala |
|     |     | 340 |     |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Ala | Gln | Asp | Tyr | Lys | Lys | Leu | Leu | Ser | Asp | Arg | Thr | Lys | Leu | Val | Glu |
|     | 355 |     |     |     |     | 360 |     |     |     |     |     | 365 |     |     |     |
| Thr | Ser | Leu | Val | Asn | Ala | Ile | Gly | Val | Ser | Val | Ala | His | Thr | Ala | Leu |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Asn | Leu | Asn | Val | Lys | Ala | Ile | Val | Ala | Ala | Thr | Glu | Ser | Gly | Ser | Thr |
| 385 |     |     |     | 390 |     |     |     |     |     | 395 |     |     |     | 400 |     |
| Ala | Arg | Thr | Ile | Ser | Lys | Tyr | Arg | Pro | His | Ser | Asp | Ile | Ile | Ala | Val |
|     |     |     | 405 |     |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Thr | Pro | Ser | Glu | Lys | Thr | Ala | Arg | Gln | Cys | Ala | Ile | Val | Trp | Gly | Val |
|     |     | 420 |     |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Asn | Pro | Val | Lys | Glu | Gly | Arg | Lys | Thr | Thr | Asp | Ala | Leu | Leu | Asn |     |
|     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |     |
| Asn | Ala | Val | Ala | Thr | Ala | Val | Glu | Thr | Gly | Arg | Val | Ser | Asn | Gly | Asp |
|     | 450 |     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |
| Leu | Ile | Ile | Ile | Thr | Ala | Gly | Val | Pro | Thr | Gly | Glu | Lys | Gly | Thr | Thr |
| 465 |     |     |     | 470 |     |     |     |     |     | 475 |     |     |     | 480 |     |
| Asn | Met | Met | Lys | Ile | His | Leu | Val | Gly | Asp | Glu | Ile | Ala | Lys | Gly | Gln |
|     |     |     | 485 |     |     |     |     |     | 490 |     |     |     |     | 495 |     |
| Gly | Val | Gly | Arg | Gly | Ser | Val | Val | Gly | His | Ala | Ile | Val | Ala | Asp | Ser |
|     |     | 500 |     |     |     |     |     | 505 |     |     |     |     | 510 |     |     |
| Ala | Ser | Asp | Leu | Glu | Gly | Lys | Asp | Leu | Ser | Asp | Lys | Val | Ile | Ile | Thr |



|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Ala | Ile | Ala | Asn | Gln | Leu | Lys | Ser | Gln | Lys | Ile | Ser | Ser | Thr | Ile | Val |  |  |
|     |     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |  |  |
| Tyr | Leu | Pro | Glu | Phe | Ile | Arg | Thr | Leu | Lys | Gly | Gly | Phe | Lys | Asp | Gly |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |
| Ser | Phe | Glu | Lys | Lys | Leu | Gln | Arg | Val | Arg | Glu | Ala | Asn | Ile | Leu | Met |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Leu | Asp | Asp | Ile | Gly | Ala | Glu | Glu | Val | Thr | Pro | Trp | Val | Arg | Asp | Glu |  |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |  |
| Val | Ile | Gly | Pro | Leu | Leu | His | Tyr | Arg | Met | Val | His | Glu | Leu | Pro | Thr |  |  |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     |     | 255 |  |  |
| Phe | Phe | Ser | Ser | Asn | Phe | Asn | Tyr | Ser | Glu | Leu | Glu | His | His | Leu | Ser |  |  |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     |     | 270 |     |  |  |
| Ile | Thr | Arg | Asp | Gly | Thr | Glu | Lys | Thr | Lys | Ala | Ala | Arg | Ile | Ile | Glu |  |  |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |  |
| Arg | Ile | Lys | Thr | Leu | Ser | Thr | Pro | Tyr | Tyr | Leu | Thr | Gly | Lys | Asn | Phe |  |  |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |  |  |
| Arg | Asn | Asn |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 305 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

&lt;210&gt; 6057

&lt;211&gt; 338

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6057

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Met | Arg | Glu | Arg | Ile | Met | Lys | Val | Lys | Ala | Ile | Asn | Leu | Tyr | Thr | Tyr |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Lys | Glu | Pro | Phe | Lys | Ser | Pro | Ile | Ser | Thr | Pro | Lys | Val | Lys | Leu | Thr |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |  |  |
| His | Arg | Glu | Ser | Leu | Phe | Thr | Glu | Ile | Val | Thr | Tyr | Ser | Gly | Glu | Thr |  |  |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |  |  |
| Tyr | Tyr | Gly | Glu | Cys | Asn | Ala | Phe | Leu | Thr | Asn | Trp | Tyr | Asp | Lys | Glu |  |  |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |  |  |
| Thr | Ile | Leu | Thr | Val | Val | Asn | Arg | Leu | Arg | Gln | Trp | Ile | Pro | Gln | Val |  |  |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |  |  |
| Leu | His | Lys | Asp | Met | Thr | Ser | Phe | Asp | Ser | Trp | Leu | Pro | Tyr | Leu | Asn |  |  |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |  |  |
| Gln | Met | Asn | Asp | Val | Pro | Ala | Ala | Arg | Ser | Met | Val | Val | Met | Ala | Val |  |  |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Tyr | Gln | Met | Tyr | Asn | Asp | Leu | His | Asp | Phe | Glu | Val | Gln | Tyr | Gly | Ala |  |  |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |  |  |
| Thr | Val | Ser | Gly | Leu | Thr | Asn | Ser | Gln | Ile | Glu | Thr | Leu | Leu | Glu | Thr |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Arg | Pro | Lys | Arg | Ile | Lys | Leu | Lys | Trp | Ser | Thr | Ser | Leu | Ile | Lys | Asp |  |  |
| 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Leu | Glu | Thr | Ile | Arg | Leu | Leu | Asn | Phe | Asp | Cys | Asp | Ile | Ala | Ile | Asp |  |  |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |  |  |
| Ala | Asn | Glu | Ser | Leu | Thr | Lys | Pro | Ser | Phe | Leu | Gln | Leu | Ala | Asn | Val |  |  |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Asn | Thr | Ser | Asp | Ile | Ile | Tyr | Ile | Glu | Glu | Pro | Phe | Lys | Ile | Leu | Glu |  |  |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |  |  |
| Asp | Leu | Asn | Asp | Ile | Asp | Met | Ser | Ile | Phe | Pro | Arg | Ile | Ala | Ile | Asp |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Glu | Lys | Ala | Leu | Ser | Ile | Glu | Lys | Ile | Gln | Ser | Ile | Ile | Gln | Gln | Tyr |  |  |
| 225 |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     |     | 240 |  |  |

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<210> 6058
<211> 320
<212> PRT
<213> S.epidermidis
```

|       |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> | 6058 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Ile   | Thr  | Gly | Arg | Arg | Glu | Lys | Met | Arg | Asn | Val | Glu | Lys | Leu | Asn | Pro |
| 1     |      |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly   | Asp  | Ser | Val | Asp | His | Phe | Phe | Leu | Ile | His | Arg | Ala | Thr | Gln | Gly |
|       |      |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Val   | Thr  | Ala | Gln | Gly | Lys | Asp | Tyr | Met | Thr | Leu | Phe | Leu | Gln | Asp | Lys |
|       |      | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ser   | Gly  | Asp | Ile | Glu | Ala | Lys | Leu | Trp | Thr | Ala | Thr | Lys | Asp | Asp | Met |
|       | 50   |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gln   | Thr  | Leu | Lys | Pro | Glu | Thr | Ile | Val | His | Val | Lys | Gly | Asp | Ile | Ile |
| 65    |      |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Asn   | Tyr  | Arg | Gly | Arg | Lys | Gln | Met | Lys | Ile | His | Gln | Ile | Arg | Leu | Ala |
|       |      |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gln   | Ala  | Glu | Asp | Lys | Val | Ser | Thr | Lys | Asp | Phe | Val | Asp | Gly | Ala | Pro |
|       |      |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Met   | Ser  | Pro | Thr | Glu | Ile | Gln | Glu | Glu | Leu | Ser | His | Phe | Met | Leu | Asp |
|       |      | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ile   | Glu  | Asn | Ala | Asn | Leu | Gln | Arg | Ile | Thr | Arg | His | Leu | Ile | Lys | Lys |
|       | 130  |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Tyr   | Gln  | Asp | Arg | Phe | Phe | Thr | Tyr | Pro | Ala | Ala | Ser | Ser | His | His | His |
| 145   |      |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Asn   | Phe  | Ala | Ser | Gly | Leu | Ser | Tyr | His | Val | Leu | Thr | Met | Leu | Arg | Ile |
|       |      |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ala   | Lys  | Ser | Val | Cys | Asp | Ile | Tyr | Pro | Leu | Leu | Asn | Arg | Ser | Leu | Leu |
|       |      |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Tyr   | Ser  | Ala | Ile | Ile | Leu | His | Asp | Leu | Gly | Lys | Val | Arg | Glu | Leu | Ser |
|       |      | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Gly   | Pro  | Val | Ala | Thr | Thr | Tyr | Thr | Val | Glu | Gly | Asn | Leu | Leu | Gly | His |
|       | 210  |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ile   | Ser  | Ile | Ala | Ser | Asp | Glu | Val | Ala | Glu | Thr | Ala | Lys | Glu | Leu | Gly |
| 225   |      |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ile   | Asp  | Gly | Glu | Glu | Val | Met | Leu | Leu | Arg | His | Met | Ile | Leu | Ala | His |
|       |      |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| His   | Gly  | Lys | Met | Glu | Phe | Gly | Ser | Pro | Lys | Leu | Pro | His | Leu | Lys | Glu |
|       |      |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Ala   | Glu  | Ile | Leu | Tyr | Phe | Ile | Asp | Asn | Ile | Asp | Ala | Lys | Met | Asn | Met |





|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Ala | Lys | Phe | Ile | Tyr | Tyr | Phe | Ala | Gln | Tyr | Ser | Ile | Lys | Met | Glu | His |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asp | Glu | Pro | Phe | Ile | Lys | Asp | Val | Tyr | Phe | Val | Glu | Val | Ser | His | Leu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Glu | Tyr | Val | Asp | Thr | Tyr | Tyr | Glu | Thr | Leu | Gly | Pro | Cys | Leu | Tyr | His |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gln | Ile | Asn | Asp | Ile | Pro | Leu | Asn | Lys | Arg | Ser | Phe | Leu | Ile | Asn | Asp |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Lys | Ala | Ile | Leu | His | Cys | Leu | Glu | Arg | Val | Lys | Thr | Leu | Gly | Phe | Tyr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |

&lt;210&gt; 6061

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6061

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Asn | Trp | Arg | Ser | Ile | His | Met | Val | Arg | His | Asp | Phe | Lys | Val | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Glu | Trp | Leu | Gly | Gly | Arg | Glu | Glu | Val | Gly | Lys | Leu | Arg | Gly | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Ile | Asn | Glu | Asn | Ile | Ser | Ile | Pro | Ser | Ser | Leu | Gly | Gly | Gln | Gly |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu | Gly | Thr | Asn | Pro | Asp | Glu | Leu | Leu | Val | Ser | Ala | Ala | Ser | Ser | Cys |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Tyr | Ile | Ile | Ser | Leu | Ala | Ala | Thr | Leu | Glu | Lys | Ser | Gly | Phe | Thr | Asn |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     | 80  |     |
| Val | Lys | Ile | Asn | Gln | Ser | Ile | Gly | Thr | Ala | Ser | Phe | Glu | Asn | Lys |     |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Lys | Phe | Lys | Met | Glu | Arg | Ile | Thr | His | Tyr | Pro | Ser | Ile | Lys | Val | Pro |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ser | Ser | Gln | Thr | Glu | Lys | Leu | Lys | Ser | Ile | Leu | Asp | Lys | Leu | Leu | Val |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ile | Ala | Asp | Asn | Asn | Cys | Met | Ile | Ser | Asn | Ala | Ile | Arg | Asn | Asn | Val |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ile | Ile | Ser | Ile | Glu | Pro | Asn | Leu | Ile |     |     |     |     |     |     |     |
| 145 |     |     |     |     |     | 150 |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 6062

&lt;211&gt; 252

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6062

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Gln | Trp | Arg | Cys | Leu | Met | Thr | Val | Lys | Val | Glu | His | Leu | Thr | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Tyr | Gly | Lys | Lys | Pro | Val | Ile | Lys | Asp | Leu | Asn | Phe | Glu | Leu | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Gly | Glu | Ile | Val | Gly | Leu | Ile | Gly | Leu | Asn | Gly | Ala | Gly | Lys | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Thr | Ile | Lys | His | Met | Leu | Gly | Leu | Ile | Asn | Pro | Met | Glu | Gly | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Leu | Ser | Ile | Ser | Asn | Ile | Lys | Ile | Asn | Glu | Asp | Ile | Glu | Asn | Tyr | Arg |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     | 80  |     |
| Arg | Lys | Leu | Ser | Tyr | Ile | Pro | Glu | Ser | Pro | Val | Ile | Tyr | Asp | Glu | Leu |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     | 95  |     |     |  |  |
| Thr | Leu | Glu | Glu | His | Ile | Glu | Met | Thr | Ala | Met | Ala | Tyr | Gln | Leu | Ser |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Arg | Glu | Glu | Val | Met | Arg | Arg | Ala | Lys | Pro | Leu | Leu | Lys | Val | Phe | Arg |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Leu | Glu | Asn | Glu | Leu | Lys | Val | Phe | Pro | Ser | His | Phe | Ser | Lys | Gly | Met |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Lys | Gln | Lys | Val | Met | Ile | Ile | Cys | Ala | Phe | Ile | Val | Asp | Pro | Glu | Leu |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Tyr | Ile | Ile | Asp | Glu | Pro | Phe | Leu | Gly | Leu | Asp | Pro | Leu | Gly | Ile | Gln |  |  |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |  |  |
| Ser | Met | Leu | Asp | Leu | Met | Val | Glu | Lys | Arg | Asn | Glu | Asn | Arg | Thr | Val |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Leu | Met | Ser | Thr | His | Ile | Leu | Ala | Thr | Ala | Glu | Arg | Tyr | Cys | Asp | Arg |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |
| Phe | Ile | Ile | Leu | Asp | Lys | Gly | Glu | Ile | Val | Ala | Phe | Gly | Asn | Leu | Asp |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Glu | Leu | Arg | Glu | Gln | Thr | Gly | Leu | Lys | Asp | Lys | Thr | Leu | Asp | Asp | Ile |  |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |  |
| Tyr | Ile | His | Val | Thr | Gln | Gly | Ser | Ser | Ala | Tyr | Glu |     |     |     |     |  |  |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     |     |     |  |  |

&lt;210&gt; 6063

&lt;211&gt; 425

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6063

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Thr | Asn | Asp | Gly | Gly | Gln | Cys | Leu | Met | Ser | Lys | Leu | Ile | Leu | Ala | Val |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Asn | Ala | Gly | Ser | Ser | Ser | Leu | Lys | Phe | Gln | Leu | Ile | Lys | Met | Pro | Glu |  |  |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Glu | Lys | Leu | Val | Thr | Lys | Gly | Val | Ile | Glu | Arg | Ile | Gly | Leu | Ser | Asp |  |  |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |  |  |
| Ser | Ile | Phe | Thr | Ile | His | Val | Asn | Gly | Glu | Lys | Leu | Thr | Asp | Ile | Arg |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Asp | Ile | His | Asn | His | Glu | Glu | Ala | Val | Asn | Ile | Met | Leu | Asp | Ser | Phe |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |  |
| Lys | Glu | His | Glu | Met | Ile | Lys | Asp | Ile | Thr | Asp | Ile | Gln | Gly | Thr | Gly |  |  |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |  |  |
| His | Arg | Val | Val | His | Gly | Gly | Glu | Thr | Phe | Pro | Lys | Ser | Val | Val | Val |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Thr | Asp | Glu | Val | Glu | Ser | Gln | Ile | Glu | Glu | Leu | Ser | Glu | Leu | Ala | Pro |  |  |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |  |  |
| Leu | His | Asn | Pro | Ala | Asn | Leu | Met | Gly | Ile | Arg | Ala | Phe | Arg | Lys | Leu |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Leu | Pro | Glu | Ile | Pro | His | Val | Ala | Val | Phe | Asp | Thr | Ser | Phe | His | Gln |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Thr | Met | Pro | Glu | Gln | Ala | Tyr | Leu | Tyr | Ser | Leu | Pro | Tyr | His | Tyr | Tyr |  |  |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |  |  |
| Glu | Asp | Tyr | Gly | Ile | Arg | Lys | Tyr | Gly | Phe | His | Gly | Thr | Ser | His | Lys |  |  |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Tyr | Val | Ser | Arg | Arg | Ala | Ala | Gln | Ile | Val | Gly | Arg | Pro | Ile | Glu | Asp |  |  |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |  |  |
| Leu | Arg | Ile | Ile | Ser | Cys | His | Ile | Gly | Asn | Gly | Ala | Ser | Ile | Ala | Ala |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |

Ile Asp Gly Gly Glu Ser Ile Asp Thr Ser Met Gly Phe Thr Pro Leu  
 225 230 235 240  
 Ala Gly Val Thr Met Gly Thr Arg Ser Gly Asn Leu Asp Pro Ala Leu  
 245 250 255  
 Ile Pro Phe Ile Met Glu Lys Thr Gly Lys Thr Ala Asp Glu Val Leu  
 260 265 270  
 Glu Ile Leu Asn Lys Glu Ser Gly Leu Leu Gly Leu Thr Gly Thr Ser  
 275 280 285  
 Ser Asp Leu Arg Asp Leu Thr Glu Glu Ala Lys His Gly Arg Gln Arg  
 290 295 300  
 Ser Arg Val Ala Leu Asp Leu Phe Ala Ser Lys Ile His Lys Tyr Ile  
 305 310 315 320  
 Gly Ser Tyr Ala Ala Arg Met His Gly Val Asp Val Ile Val Phe Thr  
 325 330 335  
 Ala Gly Ile Gly Glu Asn Ser His Ile Ile Arg Gly Lys Val Leu Glu  
 340 345 350  
 Gly Leu Glu Phe Met Gly Val Tyr Trp Asp Pro Lys Lys Asn Glu Ser  
 355 360 365  
 Leu His Gly Glu Glu Gly Tyr Ile Asn Tyr Pro His Ser Pro Val Lys  
 370 375 380  
 Val Leu Val Val Pro Thr Asp Glu Glu Val Met Ile Ser Arg Asp Val  
 385 390 395 400  
 Ile Lys Tyr Gly Lys Leu Asn Asp Asn Thr Pro Lys Lys Glu Glu Phe  
 405 410 415  
 Asp Thr Asn Glu Ser Ile Glu Val Asn  
 420 425

<210> 6064

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6064

Arg Arg Glu Gly Gly Ala Tyr Met Ile Leu Asp Ile Phe Val His Ile  
 1 5 10 15  
 Ile Thr Thr Val Ile Ser Gly Cys Ile Val Ala Leu Phe Thr His Trp  
 20 25 30  
 Leu Arg Gln Arg Asn Asp Lys His Arg  
 35 40

<210> 6065

<211> 56

<212> PRT

<213> S.epidermidis

<400> 6065

Val Val Glu Gly His Gly Pro Asn Glu Thr Gln Gln Pro Leu Tyr Leu  
 1 5 10 15  
 Lys Lys Gly Ala Lys Pro Phe Ala Asp Lys Tyr Gly Leu Asn Asp Lys  
 20 25 30  
 Ser Glu Trp Thr Phe Lys Ser Leu Leu Ser Ile Tyr Ile Val Lys Lys  
 35 40 45  
 Ala Leu Leu Phe Ser Ser His Ile  
 50 55

<210> 6066

<211> 199  
 <212> PRT  
 <213> S.epidermidis

<400> 6066

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Ser Val Phe Ile Tyr Asn Arg Ile Asn Lys Gly Val Arg Gly Lys Met
1      5      10      15
Thr Asp Ile Ile Ile Val His Ser Lys His Gly Asn Ser Lys Asn His
      20      25      30
Trp Tyr Glu Trp Leu Arg His Asn Leu Thr Leu Glu Gly Tyr Asp Val
      35      40      45
Ser Leu Phe Asn Leu Glu Ala Asn Asp His Ala Gln Ile Asp Glu Trp
      50      55      60
Val Asn Glu Met Lys Gln Gln Leu His Ile Arg Lys Lys Asp Thr Tyr
65      70      75      80
Phe Val Thr His Gly Phe Gly Ser Ile Ala Ala Leu Lys Phe Leu Glu
      85      90      95
Glu Thr His His His Ile Glu Gly Phe Phe Ser Ile Ala Gly Phe Lys
      100      105      110
Glu Asp Ala Gln Asp Ile Asp Glu Asp Val Asp Leu Lys Gly Val Thr
      115      120      125
Ile Asp Tyr Asp Lys Ile Lys Glu Gln Val Asp Lys Phe Tyr Gly Leu
      130      135      140
Thr Ser Lys Asp Asp Gln Tyr Val Ser Tyr Lys Glu Thr Gln Arg Leu
145      150      155      160
Met Asn Ser Leu Asn Gly His Thr Arg Val Val Glu Asp Gly Gly His
      165      170      175
Phe Leu Glu Glu Glu Gly Phe Val Thr Phe Thr Ser Leu Ile Asn Arg
      180      185      190
Met Gln Gly Tyr Met Thr Arg
      195

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<210> 6067  
 <211> 179  
 <212> PRT  
 <213> S.epidermidis

<400> 6067

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Cys Ile Ile Ile Lys Lys Glu Val Lys Thr Met Lys Cys Leu Phe Lys
1      5      10      15
Met Leu Ser Ile Ile Ile Ile Met Leu Ser Thr Phe Thr Leu Phe Ile
      20      25      30
Ser Pro Ser Thr Tyr Ala Asn Glu Asp Glu Asn Trp Thr Lys Ile Lys
      35      40      45
Asn Arg Gly Glu Leu Arg Val Gly Leu Ser Ala Asp Tyr Ala Pro Leu
      50      55      60
Glu Phe Glu Lys Thr Ile His Gly Lys Thr Glu Tyr Ala Gly Val Asp
65      70      75      80
Ile Glu Leu Ala Lys Lys Ile Ala Lys Asp Asn His Leu Lys Leu Lys
      85      90      95
Ile Val Asn Met Gln Phe Asp Ser Leu Leu Gly Ala Leu Lys Thr Gly
      100      105      110
Lys Ile Asp Ile Ile Ile Ser Gly Met Thr Thr Thr Pro Glu Arg Lys
      115      120      125
Lys Glu Val Asp Phe Thr Lys Pro Tyr Met Ile Thr Asn Asn Val Met
      130      135      140

```

Met Ile Lys Lys Asp Asp Ala Lys Arg Tyr Gln Asn Ile Lys Asp Phe  
 145 150 155 160  
 Glu Gly Lys Lys Ile Ala Ala Gln Lys Gly Thr Asp Gln Ala His Pro  
 165 170 175  
 Cys Thr Asn

<210> 6068

<211> 485

<212> PRT

<213> S.epidermidis

<400> 6068

Ser Arg Tyr Met Ala Tyr Phe Asn Lys Phe Leu Ser Asn Ser Glu Arg  
 1 5 10 15  
 Lys Arg Gly Lys Val Ser Lys Lys Val Ala Ile Ile Gly Ala Gly Ile  
 20 25 30  
 Thr Gly Leu Ser Ser Ala Tyr Phe Ile Lys Lys Gln Asp Pro Ser Ile  
 35 40 45  
 Glu Val Thr Ile Phe Glu Ala Ser Asn Arg Val Gly Gly Lys Ile Gln  
 50 55 60  
 Thr Tyr Arg Ser Asp Gly Tyr Thr Ile Glu Leu Gly Pro Glu Ser Tyr  
 65 70 75 80  
 Leu Gly Arg Lys Thr Ile Met Thr Asp Val Ala Lys Asp Ile Gly Leu  
 85 90 95  
 Glu Asn Asp Leu Ile Thr Asn Thr Thr Gly Gln Ser Tyr Ile Phe Ala  
 100 105 110  
 Lys Asn Lys Leu Tyr Pro Ile Pro Gly Gly Ser Ile Met Gly Ile Pro  
 115 120 125  
 Thr Asp Ile Lys Pro Phe Ile Lys Thr Arg Leu Ile Ser Pro Ile Gly  
 130 135 140  
 Lys Leu Arg Ala Gly Leu Asp Leu Phe Lys Lys Pro Ile Glu Ile Glu  
 145 150 155 160  
 Asp Asp Ile Ser Val Gly Ser Phe Phe Arg Gln Arg Leu Gly Asn Glu  
 165 170 175  
 Val Leu Glu Asn Leu Ile Glu Pro Leu Met Gly Gly Ile Tyr Gly Thr  
 180 185 190  
 Asp Ile Asp Gln Leu Ser Leu Met Ser Thr Phe Pro Asn Phe Lys Glu  
 195 200 205  
 Lys Glu Glu Gln Phe Gly Ser Leu Ile Lys Gly Met Lys Asp Glu Lys  
 210 215 220  
 Glu Gln Arg Ile Lys Lys Arg Gln Leu Tyr Pro Gly Ala Pro Lys Gly  
 225 230 235 240  
 Gln Phe Lys Gln Phe Arg His Gly Leu Ser Ser Phe Ile Glu Ala Leu  
 245 250 255  
 Val Lys Asp Ile Glu Ser Lys Gly Val His Ile Arg Tyr Asn Thr Pro  
 260 265 270  
 Val Lys Asp Ile Leu Ile Ser Gln Lys Asp Tyr Glu Ile Leu Leu Glu  
 275 280 285  
 Asp Asp Ser Lys Glu Lys Phe Asn Gly Leu Leu Val Thr Thr Pro His  
 290 295 300  
 Gln Val Phe Leu Asn Trp Phe Ser His Asp Pro Ala Phe Asp Tyr Phe  
 305 310 315 320  
 Lys Asn Met Asp Ser Thr Thr Val Ala Thr Val Val Leu Ala Phe Asp  
 325 330 335  
 Glu Lys Asn Ile Thr Asn Thr Tyr Asp Gly Thr Gly Phe Val Ile Ala

340 345 350  
 Arg Thr Ser Gln Thr Asp Ile Thr Ala Cys Thr Trp Thr Ser Lys Lys  
 355 360 365  
 Trp Pro Phe Thr Thr Pro Glu Gly Lys Val Leu Ile Arg Ala Tyr Ile  
 370 375 380  
 Gly Lys Pro Gly Asp Thr Val Val Asp Asp His Thr Asp Glu Glu Ile  
 385 390 395 400  
 Val Ser Ile Val Arg Lys Asp Leu Ser Gln Met Met Thr Ile Ser Gly  
 405 410 415  
 Asn Pro Asp Phe Thr Ile Val Asn Arg Leu Pro Lys Ser Met Pro Gln  
 420 425 430  
 Tyr His Val Gly His Ile Lys Met Ile Lys Glu Ile Gln Gln His Ile  
 435 440 445  
 Lys Thr Thr Tyr Pro Arg Leu Arg Val Thr Gly Ala Pro Phe Glu Ala  
 450 455 460  
 Val Gly Leu Pro Asp Cys Ile Gln Gln Gly Lys Asn Ala Val Asp Glu  
 465 470 475 480  
 Ile Leu Glu Glu Leu  
 485

<210> 6069  
 <211> 116  
 <212> PRT  
 <213> S.epidermidis

<400> 6069  
 Thr Asn Asp Met Asn Tyr Val Arg Gly Glu Phe Val Met Lys Ser Val  
 1 5 10 15  
 Asn Phe Lys Lys Ile Thr Ile Leu Phe Phe Ser Thr Ala Phe Leu Ile  
 20 25 30  
 Leu Ile Phe Ser Leu Ile Phe Leu Thr Lys Lys Lys Leu Tyr Asn Ala  
 35 40 45  
 Glu Leu Leu Leu Asn Glu Val Lys Thr Tyr Phe Arg Glu Val Lys Gly  
 50 55 60  
 Ser Tyr Ile Val Gln Glu Pro Ile Val Leu Glu Asn Ile Asn His Asn  
 65 70 75 80  
 Gln Pro Ile Tyr Gln Gly Gly Ile Thr Val Leu Lys Asn Asp His Leu  
 85 90 95  
 Ile Asn Tyr Glu Phe Tyr Ala Asp Ala Val Ser Gly Gln Ile Ile Asp  
 100 105 110  
 Ile Ile Glu Leu  
 115

<210> 6070  
 <211> 157  
 <212> PRT  
 <213> S.epidermidis

<400> 6070  
 Ile Asn Ser Ile Asp Arg Gln Ser Phe Thr Asp Leu Ile Gln Thr Lys  
 1 5 10 15  
 Phe Lys Met Val Arg Ile Glu Ala Gly Tyr Thr Gln Asp Thr Met Ala  
 20 25 30  
 Gln Thr Ile Gly Leu Ser Lys Lys Thr Leu Val Gln Ile Glu Lys Glu  
 35 40 45  
 Arg Val Leu Pro Asn Trp Thr Thr Cys Val Ser Ile Cys Ala Leu Phe

|   |     |     |
|---|-----|-----|
| 50  | 55  | 60  |
| Arg Asp Ser Asp Val Leu Asn Ser Thr Phe Gly Cys Asp Pro Leu Glu |     |     |
| 65  | 70  | 75  |
| Ile Val Gln Thr Ile Ser Arg Asn His Cys Ala Tyr Pro Asn His Ser |     | 80  |
|   | 85  | 90  |
| Thr Thr Ser Asp Ile Tyr Trp Asn Thr Ile Asp Thr Arg Asn Gly Phe |     | 95  |
|   | 100 | 105 |
| Ile Leu Gln Ser Asn Lys Val Ser Asn Ile Tyr Arg Val Leu Asn Asn |     | 110 |
|   | 115 | 120 |
| Glu Lys Gln Pro Ile Phe Gly Thr Ser Lys Met Arg Glu Ala Glu Thr |     | 125 |
|   | 130 | 135 |
| Tyr Phe Asn Arg Asn Ala Lys Glu Glu Leu Ile His Val             |     | 140 |
| 145   | 150 | 155 |

&lt;210&gt; 6071

&lt;211&gt; 442

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6071

|   |     |     |
|---|-----|-----|
| Val Arg Ser Ile Glu Met Thr His Tyr His Phe Val Gly Ile Lys Gly |     |     |
| 1   | 5   | 10  |
| Ser Gly Met Ser Ser Leu Ala Gln Ile Met His Asp Leu Gly His Glu |     | 15  |
|   | 20  | 25  |
| Val Gln Gly Ser Asp Ile Glu Ser Tyr Val Phe Thr Glu Val Ala Leu |     | 30  |
|   | 35  | 40  |
| Arg Asn Lys Gly Ile Lys Ile Leu Pro Phe Asp Ala Asn Asn Ile Thr |     | 45  |
|   | 50  | 55  |
| Lys Glu Met Val Val Ile Gln Gly Asn Ala Phe Pro Asp Asn His Glu |     | 60  |
| 65  | 70  | 75  |
| Glu Ile Val Arg Ala His Glu Leu Lys Leu Asp Ile Ile Lys Tyr His |     | 80  |
|   | 85  | 90  |
| Asp Phe Leu Gly His Val Ile Asn Gln Tyr Thr Ser Val Ala Val Thr |     | 95  |
|   | 100 | 105 |
| Gly Ala His Gly Lys Thr Ser Thr Thr Gly Leu Leu Ser His Val Met |     | 110 |
|   | 115 | 120 |
| Asn Gly Asp Lys Lys Thr Ser Phe Leu Ile Gly Asp Gly Thr Gly Met |     | 125 |
|   | 130 | 135 |
| Gly Leu Pro Gly Ser Asp Tyr Phe Ala Phe Glu Ala Cys Glu Tyr Arg |     | 140 |
| 145   | 150 | 155 |
| Arg His Phe Leu Ser Tyr His Pro Asp Tyr Ala Ile Met Thr Asn Ile |     | 160 |
|   | 165 | 170 |
| Asp Phe Asp His Pro Asp Tyr Phe Lys Asn Ile Asp Asp Val Tyr Asp |     | 175 |
|   | 180 | 185 |
| Ala Phe Gln His Met Ala Leu Asn Val Lys Lys Gly Ile Ile Ala Trp |     | 190 |
|   | 195 | 200 |
| Gly Asp Asp Glu Tyr Leu Arg Lys Leu Asp Val Asp Ile Pro Val Tyr |     | 205 |
|   | 210 | 215 |
| Tyr Tyr Gly Phe Lys Glu Thr Asp Asp Ile Tyr Ala Lys Asn Ile Gln |     | 220 |
| 225   | 230 | 235 |
| Ile Thr Glu Lys Gly Thr Gln Phe Asp Val Tyr Ile Lys Gly Glu Phe |     | 240 |
|   | 245 | 250 |
| Tyr Asp Gln Phe Leu Ser Pro Gln Tyr Gly Asn His Asn Ile Leu Asn |     | 255 |
|   | 260 | 265 |
| Ala Leu Ala Val Ile Ala Ile Ser Tyr Leu Glu Asn Met Asn Val Glu |     | 270 |
|   | 275 | 280 |
|   |     | 285 |



Asn Ile Lys Glu Ala Leu Ile Thr Phe Gly Gly Val Lys Arg Arg Phe  
 290 295 300  
 Asn Glu Thr Lys Val Ser Asn Gln Val Ile Val Asp Asp Tyr Ala His  
 305 310 315 320  
 His Pro Arg Glu Ile Ser Ala Thr Ile Glu Thr Ala Arg Lys Lys Tyr  
 325 330 335  
 Pro Gln Lys Asp Val Val Ala Val Phe Gln Pro His Thr Phe Ser Arg  
 340 345 350  
 Thr Gln Ala Phe Leu Asn Glu Phe Ala Glu Ser Leu Ser Lys Ala Asp  
 355 360 365  
 Gln Val Phe Leu Cys Glu Ile Phe Gly Ser Ile Arg Glu Asn Thr Gly  
 370 375 380  
 Asp Leu Thr Ile Glu Asp Leu Ile Asn Arg Ile Asp Gly Ser Thr Leu  
 385 390 395 400  
 Ile Asp Glu Asn Ser Ile Asp Val Leu Glu Lys Phe Asp Asn Ala Val  
 405 410 415  
 Ile Leu Phe Met Gly Ala Gly Asp Ile Gln Lys Leu Leu Lys Ala Tyr  
 420 425 430  
 Phe Glu Lys Leu Gly Val Lys Asn Asp Phe  
 435 440

<210> 6072  
 <211> 65  
 <212> PRT  
 <213> S.epidermidis

<400> 6072  
 Leu Phe Phe Ile Thr Lys Phe Tyr Ser Val Asn Leu Val Thr Leu Asn  
 1 5 10 15  
 Ile Ile Ser Tyr Ser Leu Asn Ser Leu Tyr Ser Tyr Trp Asn Val Arg  
 20 25 30  
 Met Ser Glu Phe Cys Ser Phe Ile Tyr Phe Pro Ser Ile Tyr Ser Leu  
 35 40 45  
 Leu Phe Gly Glu Ile Ser Arg Lys Lys Tyr Leu Thr Ile Ser Val Leu  
 50 55 60  
 Ile  
 65

<210> 6073  
 <211> 79  
 <212> PRT  
 <213> S.epidermidis

<400> 6073  
 Leu Gly Phe Ile Thr Ser Lys Lys Asp Met Asp Tyr Ile Thr Lys Asn  
 1 5 10 15  
 Ile Asn Ser Phe Thr Lys Arg Leu Ala Glu Ala Ile Asn Gly Arg Gln  
 20 25 30  
 Ile Asn Ala Leu Lys Ser Asn Pro Ser Ser Lys Lys Ile Thr Trp Asn  
 35 40 45  
 Trp Gly Gly Thr Phe Tyr Pro Asn Ala Pro Lys Ser Gly Ile Arg Val  
 50 55 60  
 Arg Arg Ser Leu Gly Ile Asn Gly Ala Ile Val Glu Ser Gly Ser  
 65 70 75

<210> 6074

<211> 146  
 <212> PRT  
 <213> S.epidermidis

<400> 6074

```

Arg Ser Val Ile Ile Met Ser Glu Thr Ile Phe Ser Lys Ile Ile Ser
1          5          10          15
Gly Glu Ile Pro Ser Phe Lys Ile Tyr Glu Asn Asp Tyr Val Tyr Ala
20          25          30
Phe Leu Asp Ile Ser Gln Val Ser Lys Gly His Thr Leu Leu Val Pro
35          40          45
Lys Lys Pro Ser Ala Asn Ile Phe Glu Thr Asp Glu Glu Thr Met Lys
50          55          60
His Ile Gly Val Ala Leu Pro Lys Val Ala Asn Ala Ile Lys Asn Ala
65          70          75          80
Phe His Pro Asp Gly Leu Asn Ile Ile Gln Asn Asn Gly Glu Tyr Ala
85          90          95
Asp Gln Ser Val Phe His Ile His Phe His Leu Ile Pro Arg Tyr Glu
100         105         110
Asn Asp Ile Asp Gly Phe Gly Tyr Lys Trp Glu Thr His Glu Asp Val
115         120         125
Ile Asp Asp Glu Thr Lys Gln Lys Ile Ala Thr Gln Ile Gln Ala Gln
130         135         140
Ile Ser
145

```

<210> 6075  
 <211> 52  
 <212> PRT  
 <213> S.epidermidis

<400> 6075

```

Asn Val Tyr Met Phe Lys Ile Cys Asp Ser Tyr Met Ile Tyr Ile Lys
1          5          10          15
Leu Gly Ser Ile Glu Ile Met Thr Leu Phe Arg Ile Ala Leu Asp Ile
20          25          30
Ile Gln Leu Leu Ser Ala Ile Thr Asn Asn Leu Ser Lys Ile Leu Leu
35          40          45
Ser Phe Ser Val
50

```

<210> 6076  
 <211> 68  
 <212> PRT  
 <213> S.epidermidis

<400> 6076

```

Ser Leu Tyr Ile Arg His Leu Val Asn Phe Val Tyr Trp Tyr Leu Leu
1          5          10          15
Asn Tyr Ala Lys Gly Pro Tyr Phe Ser Lys Tyr Phe Asn Val Lys Leu
20          25          30
His Ile Asn Ser Lys Tyr Phe Gly Glu Thr Leu Glu Gly Thr Gly Gln
35          40          45
Ala Glu Asp Tyr Arg Leu Lys Leu Ser Pro Lys Lys Ala Ser Gln Gln
50          55          60
Asn Glu Val Leu

```

65

&lt;210&gt; 6077

&lt;211&gt; 211

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6077

```

Ala Gly Asp Ile Met Tyr Asn Phe Ile Ser Lys Ile Leu Asp Val Ile
1      5      10      15
Leu Val Lys Met Ser Lys Ser Leu Tyr Val Ile Gly Lys Glu Asn Ile
      20      25      30
Pro Lys Asp Ser Lys Tyr Val Val Thr Cys Thr His Glu Ser Tyr Asn
      35      40      45
Glu Val Ile Met Leu Gly Met Ala Leu Leu Pro Asn Gln Ile His Tyr
      50      55      60
Met Ala Lys Lys Glu Leu Phe Lys Asn Gln Trp Ala Gly Lys Phe Leu
65      70      75      80
Lys Ser Leu Asn Ala Phe Pro Val Asp Arg Glu Asn Pro Gly Pro Ser
      85      90      95
Thr Leu Lys Lys Pro Val Asn Leu Leu Lys Glu His Lys Thr Ile Gly
      100     105     110
Ile Phe Pro Thr Gly His Arg Thr Ser Val Glu Gly Ala Pro Leu Lys
      115     120     125
Arg Gly Ala Ala Thr Ile Ala Met Leu Gly Lys Ala Pro Ile Leu Pro
      130     135     140
Ala Ala Tyr Val Gly Pro Lys Lys Ile His Gly Leu Ile Thr Gly Gln
145     150     155     160
Ala Leu Ile Lys Ile Gly Lys Pro Ile Glu Met Asp Asp Ile Pro Lys
      165     170     175
Asp Leu Lys Arg Asn Glu Lys Val Asp Phe Leu Thr Lys Glu Ile Glu
      180     185     190
Arg Arg Thr Thr Gln Leu Gln Lys Glu Leu Asn Glu Ile Ser Cys Ser
      195     200     205
Leu Lys Lys
      210

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&lt;210&gt; 6078

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6078

```

Ala Trp Asp Ile Ile Ile Val Pro Gly Phe Leu Ile Tyr Ile Leu Leu
1      5      10      15
Phe Leu Asn Pro Trp Ile Leu His Arg Leu Ser Thr Asn Arg Tyr Gly
      20      25      30
Lys Met Lys Glu Tyr Lys Val Lys Leu Phe Leu Ile Ile His Thr Val
      35      40      45
Lys Phe
      50

```

&lt;210&gt; 6079

&lt;211&gt; 371

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

6077  
 6078  
 6079

&lt;400&gt; 6079

His Leu Ser Ile Leu Lys Tyr Leu Ile Lys Cys Asn Met Leu Ser Leu  
 1 5 10 15  
 Val Arg Met Ile Gln Leu Trp Gly Asp Ser Arg Val Arg Ser Lys Asn  
 20 25 30  
 Asp Thr Ile Leu Lys Ala Ile Lys Gly Glu Ser Thr Ser His Thr Pro  
 35 40 45  
 Val Trp Phe Met Arg Gln Ala Gly Arg Ser Gln Pro Glu Tyr Arg Lys  
 50 55 60  
 Leu Lys Glu Lys Tyr Ser Leu Phe Glu Ile Thr His Gln Pro Glu Leu  
 65 70 75 80  
 Cys Ala Tyr Val Thr His Leu Pro Val Asp Asn Tyr Gln Thr Asp Ala  
 85 90 95  
 Ala Val Leu Tyr Lys Asp Ile Met Thr Pro Leu Lys Pro Ile Gly Val  
 100 105 110  
 Asp Val Glu Ile Lys Ser Gly Ile Gly Pro Val Ile Ser Asn Pro Ile  
 115 120 125  
 Gln Thr Val Lys Asp Val Glu Arg Leu Ser Gln Ile Asp Pro Lys Arg  
 130 135 140  
 Asp Val Pro Tyr Val Leu Asp Thr Ile Lys Leu Leu Thr Glu Glu Lys  
 145 150 155 160  
 Leu Asn Val Pro Leu Ile Gly Phe Thr Gly Ala Pro Phe Thr Leu Ala  
 165 170 175  
 Ser Tyr Met Ile Glu Gly Gly Pro Ser Lys Asn Tyr Asn Phe Thr Lys  
 180 185 190  
 Ala Met Met Tyr Arg Asp Glu Glu Thr Trp Phe Ala Leu Met Asn His  
 195 200 205  
 Leu Val Asp Ile Ser Ile Asp Tyr Val Val Ala Gln Val Glu Ala Gly  
 210 215 220  
 Ala Glu Ile Ile Gln Ile Phe Asp Ser Trp Val Gly Ala Leu Asn Val  
 225 230 235 240  
 Lys Asp Tyr Arg Tyr Tyr Ile Lys Pro Ala Met Asn Lys Leu Ile Ser  
 245 250 255  
 Gly Ile Lys Ala Tyr Tyr Asp Val Pro Ile Ile Leu Phe Gly Val Gly  
 260 265 270  
 Ala Ser His Leu Ile Asn Glu Trp Asn Asp Leu Pro Ile Asp Val Leu  
 275 280 285  
 Gly Leu Asp Trp Arg Thr Thr Ile Lys Gln Ala Asp Lys Met Gly Val  
 290 295 300  
 Asn Lys Ala Ile Gln Gly Asn Leu Asp Pro Ser Val Leu Leu Ala Pro  
 305 310 315 320  
 Trp Asp Val Ile Glu Ser Arg Leu Lys Asp Ile Leu Asn Gln Gly Leu  
 325 330 335  
 Asn Arg Gly Lys His Ile Phe Asn Leu Gly His Gly Val Phe Pro Glu  
 340 345 350  
 Val Lys Pro Glu Thr Leu Arg Lys Val Thr Glu Phe Val His Asn Tyr  
 355 360 365  
 Thr Ala Lys  
 370

&lt;210&gt; 6080

&lt;211&gt; 42

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6080

Leu Asn Gly Ile Ser Ser Ser Asn Ser Ser Gln Leu Ile Met Phe Val  
 1 5 10 15  
 Glu Leu Lys Asn Gly Asn His His Ile Tyr Tyr Gly Ser Tyr Arg Met  
 20 25 30  
 Asn Tyr Ser Cys Asn Ile Ile Ser Leu His  
 35 40

&lt;210&gt; 6081

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6081

Leu Leu Leu Ile Lys Tyr Ser Val Tyr Tyr Val Lys Ile Glu Leu Arg  
 1 5 10 15  
 Lys Ile Lys Gly Ala Ile Met Met Ile Ser Tyr Lys Asn Ile Leu Ile  
 20 25 30  
 Ala Val Asp Gly Ser His Glu Ala Glu Trp Ala Phe Asn Lys Ala Val  
 35 40 45  
 Gly Val Ala Lys Arg Asn Asp Ala Gln Leu Thr Ile Val Asn Val Ile  
 50 55 60  
 Asp Ser Arg Thr Tyr Ser Ser Tyr Glu Val Tyr Asp Ala Gln Phe Thr  
 65 70 75 80  
 Glu Lys Ser Lys His Phe Ser Glu Glu Leu Leu Lys Gly Tyr Lys Glu  
 85 90 95  
 Val Ala Thr Asn Ala Gly Val Lys Asn Val Asp Thr Arg Leu Glu Phe  
 100 105 110  
 Gly Ser Pro Lys Ala Ile Ile Pro Lys Lys Leu Ala Arg Asp Val Gly  
 115 120 125  
 Ala Asp Leu Ile Met Ser Gly Thr Ser Gly Leu Asn Ala Val Glu Arg  
 130 135 140  
 Phe Ile Val Gly Ser Val Ser Glu Ala Ile Val Arg His Ala Pro Cys  
 145 150 155 160  
 Asp Val Leu Val Val Arg Thr Glu Glu Met Pro Glu Asp Phe Gln Pro  
 165 170 175  
 Gln Val Ala Thr Pro Gln Leu Arg Glu Lys Tyr Gln Asp  
 180 185

&lt;210&gt; 6082

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6082

Gly Val Leu Ile Met Asn Val Phe Gln Met Arg Asp Lys Leu Lys Ala  
 1 5 10 15  
 Arg Leu Lys His Leu Asp Val Glu Phe Lys Phe Asp Arg Glu Glu Glu  
 20 25 30  
 Thr Leu Arg Ile Val Arg Ile Asp Asn His Lys Gly Val Thr Ile Lys  
 35 40 45  
 Leu Asn Ala Ile Val Ala Lys Tyr Glu Glu Gln Lys Glu Lys Ile Ile  
 50 55 60  
 Asp Glu Ile Cys Tyr Tyr Val Glu Glu Ala Ile Ala Gln Met Gly Asp  
 65 70 75 80  
 Glu Val Ile Asn Asn Val Glu Asp Ile Gln Ile Met Pro Val Ile Arg

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |
| Ala | Thr | Ser | Phe | Asp | Lys | Glu | Thr | Lys | Glu | Gly | His | Ala | Phe | Val | Leu |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Thr | Glu | His | Thr | Ala | Glu | Thr | Asn | Ile | Tyr | Tyr | Ala | Leu | Asp | Leu | Gly |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Lys | Ser | Tyr | Arg | Leu | Ile | Asp | Glu | Asn | Met | Leu | Gln | Thr | Leu | Asn | Leu |  |  |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Thr | Ala | Gln | Gln | Val | Lys | Glu | Met | Ser | Leu | Phe | Asn | Val | Arg | Lys | Leu |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Glu | Cys | Arg | Tyr | Ser | Thr | Asp | Glu | Val | Lys | Gly | Asn | Ile | Phe | Tyr | Phe |  |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Ile | Asn | Thr | Asn | Asp | Gly | Tyr | Asp | Ala | Ser | Arg | Ile | Leu | Asn | Thr | Ser |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Phe | Leu | Asn | His | Ile | Gln | His | Gln | Cys | Glu | Gly | Glu | Met | Leu | Val | Gly |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |
| Val | Pro | His | Gln | Asp | Val | Leu | Ile | Leu | Ala | Asp | Ile | Arg | Asn | Lys | Thr |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Gly | Tyr | Asp | Val | Met | Ala | His | Leu | Thr | Met | Glu | Phe | Phe | Thr | Lys | Gly |  |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |  |
| Leu | Val | Pro | Ile | Thr | Ser | Leu | Ser | Phe | Gly | Tyr | Asp | Asn | Gly | His | Leu |  |  |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |  |  |
| Glu | Pro | Ile | Phe | Ile | Leu | Gly | Lys | Asn | Asn | Lys | Gln | Lys | Arg | Asp | Pro |  |  |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |  |  |
| Asn | Val | Ile | Gln | Arg | Leu | Glu | Ala | Asn | Arg | Lys | Lys | Phe | Lys | Lys | Asp |  |  |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     |     | 285 |     |     |  |  |

&lt;210&gt; 6083

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6083

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Ser | Ser | Phe | Phe | Phe | Phe | Val | Val | Met | Lys | Lys | Gln | Lys | Arg | Val |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | His | Ala | Tyr | Arg | Asp | Ile | Leu | Phe | Tyr | Val | Ser | Ser | Pro | Tyr | Ser |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Ser | Tyr | Ala | Thr | Arg | Pro | His | Trp | Glu | Gln | His | Arg | Ala | Arg |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

&lt;210&gt; 6084

&lt;211&gt; 103

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6084

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Glu | Ser | Ile | Thr | Val | Asp | Glu | Leu | Lys | Lys | Lys | Ile | Leu | Asp | Ser |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asn | Pro | Val | Asn | Ile | Val | Asp | Val | Arg | Thr | Asn | Glu | Glu | Thr | Glu | Met |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Val | Ile | Pro | Gly | Ala | Lys | Thr | Ile | Pro | Met | Asp | Glu | Ile | Pro | Asp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asn | Leu | Lys | Glu | Phe | Asn | Lys | Asn | Asp | Thr | Tyr | Tyr | Ile | Val | Cys | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Gly | Ser | Arg | Ser | Ala | Lys | Val | Val | Ser | Tyr | Leu | Glu | Glu | Gln | Gly |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Val | His | Ala | Val | Asn | Val | Glu | Gly | Gly | Met | Asn | Ala | Trp | Gly | Asp | Glu |

85  
Gly Thr Val Ile Asp Asn Ile  
100

90

95

<210> 6085  
<211> 564  
<212> PRT  
<213> S.epidermidis

<400> 6085

Leu Tyr Lys Ile Lys Gly Leu Asn Ile Leu Ala Gln Leu Ser Asp Leu  
1 5 10 15  
Glu Ile Ala Asn Leu Ser Lys Leu Lys Pro Ile Ser Glu Ile Ala Arg  
20 25 30  
Lys Val Gly Ile Thr Glu Asp Ala Leu Glu Pro Tyr Gly His Tyr Lys  
35 40 45  
Ala Lys Ile Asp Ile Asn Gln Ile Gln Glu Gln Lys Lys Lys Gly Lys  
50 55 60  
Val Val Leu Val Thr Ala Met Ser Pro Thr Pro Ala Gly Glu Gly Lys  
65 70 75 80  
Ser Thr Val Thr Val Gly Leu Ala Asp Ala Phe Asn Lys Leu Asn His  
85 90 95  
Asn Val Thr Val Ala Leu Arg Glu Pro Ala Leu Gly Pro Thr Phe Gly  
100 105 110  
Ile Lys Gly Gly Ala Thr Gly Gly Gly Tyr Ala Gln Val Leu Pro Met  
115 120 125  
Glu Asp Ile Asn Leu His Phe Asn Gly Asp Phe His Ala Ile Thr Thr  
130 135 140  
Ala Asn Asn Ala Leu Ser Ala Phe Ile Asp Asn His Leu His Gln Gly  
145 150 155 160  
Asn Glu Leu Gly Ile Asp Gln Arg Arg Ile Glu Trp Lys Arg Val Leu  
165 170 175  
Asp Met Asn Asp Arg Ala Leu Arg His Val Asn Val Gly Leu Gly Gly  
180 185 190  
Thr Thr His Gly Val Pro Arg Glu Asp Gly Phe Asn Ile Thr Val Ala  
195 200 205  
Ser Glu Ile Met Ala Ile Leu Cys Leu Ser Arg Asn Ile Lys Asp Leu  
210 215 220  
Lys Glu Lys Ile Ser Arg Ile Thr Ile Gly Tyr Thr Arg His His Lys  
225 230 235 240  
Pro Ile Thr Val Ser Asp Leu Lys Val Glu Gly Ala Leu Thr Leu Ile  
245 250 255  
Leu Lys Asp Ala Ile Lys Pro Asn Leu Val Gln Thr Ile Glu Gly Thr  
260 265 270  
Pro Ala Leu Val His Gly Gly Pro Phe Ala Asn Ile Ala His Gly Cys  
275 280 285  
Asn Ser Ile Leu Ala Thr Glu Thr Ala Arg Asn Leu Ser Asp Ile Val  
290 295 300  
Val Thr Glu Ala Gly Phe Gly Ser Asp Leu Gly Ala Glu Lys Phe Met  
305 310 315 320  
Asn Ile Lys Ala Arg Glu Ala Gly Phe Asp Pro Ser Ala Val Val Val  
325 330 335  
Val Ala Thr Ile Arg Ala Leu Lys Met His Gly Gly Val Ala Lys Asp  
340 345 350  
Gln Leu Gln His Glu Asn Ile Glu Ala Val Glu Ala Gly Leu Val Asn  
355 360 365

6085  
564  
PRT  
S.epidermidis

Leu Glu Arg His Val Asn Asn Ile Lys Lys Tyr Gly Val Glu Pro Ile  
 370 375 380  
 Val Ala Leu Asn Ala Phe Ile His Asp Thr Pro Ser Glu Thr Ala Cys  
 385 390 395 400  
 Val Lys Gln Trp Ala Lys Asp Asn Gln Val Arg Ile Ala Leu Thr Glu  
 405 410 415  
 Val Trp Glu Lys Gly Gly Glu Gly Gly Ile Glu Leu Ala Asn Gln Val  
 420 425 430  
 Phe Asp Val Met Gln Lys Pro Gln Asn Phe Lys His Leu Tyr Glu Leu  
 435 440 445  
 Lys Gln Pro Leu Glu Ala Lys Ile Glu Thr Ile Val Lys Glu Ile Tyr  
 450 455 460  
 Gly Gly Ser Lys Val Asn Phe Ser Ser Lys Thr Gln Lys Gln Leu Lys  
 465 470 475 480  
 Gln Phe Lys Glu Asn Gly Trp Asp Glu Tyr Pro Ile Cys Met Ala Lys  
 485 490 495  
 Thr Gln Tyr Ser Phe Ser Asp Asp Gln Thr Leu Leu Gly Ala Pro Asn  
 500 505 510  
 Asp Phe Glu Ile Thr Ile Arg Glu Leu Glu Ala Lys Thr Gly Ala Gly  
 515 520 525  
 Phe Ile Val Ala Leu Thr Gly Ala Ile Met Thr Met Pro Gly Leu Pro  
 530 535 540  
 Lys Lys Pro Ala Ala Leu Asn Met Asp Val Thr Asp Asp Gly Lys Ala  
 545 550 555 560  
 Ile Gly Leu Phe

<210> 6086

<211> 380

<212> PRT

<213> S.epidermidis

<400> 6086

Gly Asp Lys Met Glu Lys Pro Thr Arg Leu Ala Leu Leu Lys Glu Ile  
 1 5 10 15  
 Ala Glu Phe Leu Asn Glu Glu Thr Glu Ile Tyr Ser Met Met Gln Gly  
 20 25 30  
 Ala Leu Arg Leu Leu Ile Asn Gly Ser Asp Phe Ser Thr Gly Trp Ile  
 35 40 45  
 Phe Tyr Ile Asp Glu Glu Gly His His Asp Leu Val Ser Ser Val Asp  
 50 55 60  
 Leu Pro Glu Ala Leu Ser Lys Asn His Cys Tyr Tyr Leu Thr Asn Gly  
 65 70 75 80  
 Ser Cys Trp Cys Val Gln Ala Tyr Gln Asn His Lys Leu Thr Lys Ala  
 85 90 95  
 Ser Asn Ile Ile Asn Cys Ser Arg Ile Asn Leu Ala Asn His Ala Tyr  
 100 105 110  
 Asp Lys Glu Thr Asn His Ile Thr His His Ala Thr Val Pro Leu Gln  
 115 120 125  
 Ser Gly Ser Glu Arg Phe Gly Leu Leu Asn Val Ala Ser Pro Asn Lys  
 130 135 140  
 Glu His Tyr Ser Glu Glu Asp Leu Glu Leu Leu Glu Ser Val Ala Phe  
 145 150 155 160  
 Gln Ile Gly Ser Ala Ile Lys Arg Ile Gln Leu Thr Asn Lys Glu Lys  
 165 170 175  
 Glu Asn Ala Lys Ile Asn Glu Arg Asn Arg Leu Ala Arg Asp Leu His





Asn Thr Gly Gln Arg Ala Ile Thr His Ile Ile Asn Ser Lys Met Ile  
           195                  200          205  
 Lys Glu Gly Val Cys Gln Leu Asp Ile Lys Leu Asp Thr Gly Arg Thr  
           210                  215          220  
 His Gln Ile Arg Val His Leu Ala Glu Ile Gly His Pro Val Ile Gly  
 225                  230          235          240  
 Asp Pro Leu Tyr Gly Thr Ser Thr Leu Arg Gln Leu Glu Leu Asn Ser  
                   245          250          255  
 His Gln Ile Glu Phe Thr His Pro Leu Thr Gln Glu Ile Ile Ser Val  
                   260          265          270  
 Ser Leu Asp Asp Lys  
           275

<210> 6088

<211> 48

<212> PRT

<213> S.epidermidis

<400> 6088

Ile His Arg Ile Gln Tyr Arg Glu Phe Phe Leu Gln Tyr His Leu His  
 1                  5                  10          15  
 Val Val Lys Thr His Leu Leu Ala Ile Met Leu Gly Asn Tyr Val Pro  
                   20          25          30  
 Ala Ser Leu Phe Phe Met Ser Phe Asn Ala Lys Asn Lys Arg Arg Gln  
           35                  40          45

<210> 6089

<211> 119

<212> PRT

<213> S.epidermidis

<400> 6089

Ile Phe Leu Ile Thr Ile Leu Leu Val Met Leu Gly Gly Gly Ile Gly  
 1                  5                  10          15  
 Ala Val Leu Arg Ala Leu Ile Thr Asn Ile Cys Gln Arg Leu Phe Asn  
                   20          25          30  
 Ser Lys Ile Pro Ile Ala Thr Ser Ile Val Asn Ile Thr Gly Ser Leu  
           35                  40          45  
 Ile Ile Gly Phe Met Met Gly His Ala Leu Asp Ser His His Met Phe  
   50                  55          60  
 Pro Phe Phe Val Thr Gly Val Leu Gly Gly Leu Thr Thr Phe Ser Thr  
 65                  70          75          80  
 Leu Ser Ser Glu Leu Val Asn Met Leu Ser Pro Gln Phe Lys Pro Ile  
                   85          90          95  
 Arg Phe Val Val Tyr Ser Leu Leu Gln Phe Ile Leu Gly Phe Ile Ala  
           100          105          110  
 Cys Phe Tyr Gly Tyr Arg Ile  
           115

<210> 6090

<211> 242

<212> PRT

<213> S.epidermidis

<400> 6090

Val Pro Val Ile Asn Ile Lys Asn Leu Asn Lys Lys Phe Gly Ala Asn

1                      5                      10                      15  
 Glu Val Leu Arg Asp Ile Asn Leu Thr Val Glu Lys Gly Glu Val Val  
                     20                      25                      30  
 Ala Ile Ile Gly Pro Ser Gly Ser Gly Lys Ser Thr Leu Leu Arg Cys  
                     35                      40                      45  
 Met Asn Leu Leu Asp Val Pro Ser Lys Gly Lys Val Ile Phe Glu Asp  
                     50                      55                      60  
 Asn Glu Leu Thr Gln His Asn Val His Leu Asp Asn Leu Arg Gln Lys  
 65                      70                      75                      80  
 Met Gly Met Val Phe Gln Asn Phe Asn Leu Phe Pro His Lys Lys Val  
                     85                      90                      95  
 Ile Glu Asn Val Met Leu Ala Pro Leu Leu Leu His Lys Asp Ser Lys  
                     100                      105                      110  
 Asp Gln Leu Lys Glu Lys Ala Leu Tyr Leu Leu Glu Lys Val Gly Leu  
                     115                      120                      125  
 Lys Asp Lys Ala Asp Ser Tyr Pro Asn Gln Leu Ser Gly Gly Gln Lys  
                     130                      135                      140  
 Gln Arg Val Ala Ile Ala Arg Ala Leu Ala Met Glu Pro Asp Val Met  
 145                      150                      155                      160  
 Leu Phe Asp Glu Pro Thr Ser Ala Leu Asp Pro Glu Val Val Gly Asp  
                     165                      170                      175  
 Val Leu Lys Val Met Arg Gln Leu Ala Asn Glu Ser Met Thr Met Val  
                     180                      185                      190  
 Ile Val Thr His Glu Met Asn Phe Ala Lys Glu Ile Ser Asp Lys Val  
                     195                      200                      205  
 Val Phe Met Ala Asp Gly Val Val Val Glu Ser Gly Thr Pro Gln Asn  
                     210                      215                      220  
 Ile Phe Glu Asn Pro Gln His Ser Arg Thr Glu Asn Phe Leu Ser Arg  
 225                      230                      235                      240  
 Val Leu

<210> 6091  
 <211> 167  
 <212> PRT  
 <213> S.epidermidis

<400> 6091  
 Cys Thr Val Ile Lys Leu Gly Arg Val Thr Tyr Met Lys Cys Pro Lys  
 1                      5                      10                      15  
 Cys Asn Ser Thr His Ser Arg Val Val Asp Ser Arg His Ala Asp Glu  
                     20                      25                      30  
 Ala Asn Ala Ile Arg Arg Arg Arg Glu Cys Glu Asn Cys Gly Thr Arg  
                     35                      40                      45  
 Phe Thr Thr Phe Glu His Ile Glu Val Ser Pro Leu Ile Val Val Lys  
                     50                      55                      60  
 Lys Asp Gly Thr Arg Glu Gln Phe Leu Arg Glu Lys Ile Leu Asn Gly  
 65                      70                      75                      80  
 Leu Val Arg Ser Cys Glu Lys Arg Pro Val Arg Tyr Gln Gln Leu Glu  
                     85                      90                      95  
 Asp Ile Thr Asn Lys Val Glu Trp Gln Leu Arg Asp Glu Gly Gln Thr  
                     100                      105                      110  
 Glu Ile Ser Ser Arg Glu Ile Gly Glu His Val Met Asn Leu Leu Met  
                     115                      120                      125  
 His Val Asp Gln Val Ser Tyr Val Arg Phe Ala Ser Val Tyr Lys Glu  
                     130                      135                      140

Phe Lys Asp Val Asp Gln Leu Leu Glu Ser Met Gln Gly Ile Leu Ser  
 145 150 155 160  
 Asp Asn Lys Arg Ser Asp Lys  
 165

<210> 6092

<211> 350

<212> PRT

<213> S.epidermidis

<400> 6092

Leu Lys Lys Met Met Gln Asn Val Ile Lys Thr Ser Lys Ile Leu Lys  
 1 5 10 15  
 Ala Lys Lys Leu Leu Arg Lys Lys Gly Gln Ile Lys Pro Thr Leu Ala  
 20 25 30  
 Gln Thr Glu Ile Glu Asp Ser Lys Ile Ser Ser Leu Asn Arg Leu Pro  
 35 40 45  
 Glu Ala Ile Leu Ser Val Lys Ser Gly Lys Val Ala Gly Val Val Val  
 50 55 60  
 Glu Lys Pro Val Gly Glu Ala Tyr Leu Lys Gln Asn Ser Glu Leu Thr  
 65 70 75 80  
 Phe Ser Lys Ile Lys Phe Asn Glu Glu Lys Lys Gln Thr Cys Ile Ala  
 85 90 95  
 Val Pro Lys Asn Ser Pro Val Leu Leu Asp Lys Leu Asn Gln Thr Ile  
 100 105 110  
 Asp Asn Val Lys Glu Lys Asn Leu Ile Asp Gln Tyr Met Thr Lys Ala  
 115 120 125  
 Ala Glu Asp Met Gln Asp Asp Gly Asn Phe Ile Ser Lys Tyr Gly Ser  
 130 135 140  
 Phe Phe Ile Lys Gly Ile Lys Asn Thr Ile Leu Ile Ser Leu Val Gly  
 145 150 155 160  
 Val Val Leu Gly Ser Ile Leu Gly Ser Phe Ile Ala Leu Leu Lys Ile  
 165 170 175  
 Ser Lys Ile Arg Pro Leu Gln Trp Ile Ala Ser Ile Tyr Ile Glu Phe  
 180 185 190  
 Leu Arg Gly Thr Pro Met Leu Val Gln Val Phe Ile Val Phe Phe Gly  
 195 200 205  
 Thr Thr Ala Ala Leu Gly Leu Asp Ile Ser Ala Leu Ile Cys Gly Thr  
 210 215 220  
 Ile Ala Leu Val Ile Asn Ser Ser Ala Tyr Ile Ala Glu Ile Ile Arg  
 225 230 235 240  
 Ala Gly Ile Asn Ala Val Asp Lys Gly Gln Thr Glu Ala Ala Arg Ser  
 245 250 255  
 Leu Gly Leu Asn Tyr Arg Gln Thr Met Gln Ser Val Val Met Pro Gln  
 260 265 270  
 Ala Ile Lys Lys Ile Leu Pro Ala Leu Gly Asn Glu Phe Val Thr Leu  
 275 280 285  
 Ile Lys Glu Ser Ser Ile Val Ser Thr Ile Gly Val Ser Glu Ile Met  
 290 295 300  
 Phe Asn Ala Gln Val Val Gln Gly Ile Ser Phe Asp Pro Phe Thr Pro  
 305 310 315 320  
 Leu Leu Val Ala Ala Leu Leu Tyr Phe Leu Leu Thr Phe Ala Leu Thr  
 325 330 335  
 Arg Val Met Asn Phe Ile Glu Gly Arg Met Ser Ala Ser Asp  
 340 345 350

<210> 6093  
 <211> 427  
 <212> PRT  
 <213> S.epidermidis

<400> 6093

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Arg | Arg | Ile | Leu | Ser | Met | Ala | Asn | Ala | Leu | Ile | Glu | Asp | Leu | Lys |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Trp | Arg | Gly | Leu | Ile | Tyr | Gln | Gln | Thr | Asp | Glu | Glu | Gly | Ile | Glu | Glu |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Leu | Leu | Asn | Lys | Glu | Gln | Val | Thr | Leu | Tyr | Cys | Gly | Ala | Asp | Pro | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Ala | Asp | Ser | Leu | His | Ile | Gly | His | Leu | Leu | Pro | Phe | Leu | Thr | Leu | Arg |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg | Phe | Gln | Glu | His | Gly | His | Arg | Pro | Ile | Val | Leu | Ile | Gly | Gly | Gly |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Thr | Gly | Met | Ile | Gly | Asp | Pro | Ser | Gly | Lys | Ser | Glu | Glu | Arg | Val | Leu |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gln | Thr | Glu | Ser | Gln | Val | Glu | Ala | Asn | Val | Lys | Gly | Leu | Ser | Asn | Gln |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Met | His | Arg | Leu | Phe | Glu | Phe | Gly | Ser | Asp | Lys | Gly | Ala | Lys | Leu | Val |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asn | Asn | Lys | Asp | Trp | Leu | Gly | Gln | Ile | Ser | Leu | Ile | Ser | Phe | Leu | Arg |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asp | Tyr | Gly | Lys | His | Val | Gly | Val | Asn | Tyr | Met | Leu | Gly | Lys | Asp | Ser |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ile | Gln | Thr | Arg | Leu | Glu | His | Gly | Ile | Ser | Tyr | Thr | Glu | Phe | Thr | Tyr |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Thr | Ile | Leu | Gln | Ala | Ile | Asp | Phe | Gly | Tyr | Leu | Asn | Arg | Glu | Leu | Asn |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Cys | Lys | Ile | Gln | Val | Gly | Gly | Ser | Asp | Gln | Trp | Gly | Asn | Ile | Thr | Ser |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Gly | Ile | Glu | Leu | Met | Arg | Arg | Met | Tyr | Gly | Gln | Thr | Glu | Ala | Tyr | Gly |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Leu | Thr | Ile | Pro | Leu | Val | Thr | Lys | Ser | Asp | Gly | Lys | Lys | Phe | Gly | Lys |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ser | Glu | Ser | Gly | Ala | Val | Trp | Leu | Asp | Pro | Glu | Lys | Thr | Ser | Pro | Tyr |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Glu | Phe | Tyr | Gln | Phe | Trp | Ile | Asn | Gln | Ser | Asp | Glu | Asp | Val | Ile | Lys |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Phe | Leu | Lys | Tyr | Phe | Thr | Phe | Leu | Glu | Lys | Glu | Glu | Ile | Asn | Arg | Leu |
|     | 275 |     |     |     |     | 280 |     |     |     |     |     | 285 |     |     |     |
| Glu | Gln | Ser | Lys | Asn | Glu | Ala | Pro | His | Leu | Arg | Glu | Ala | Gln | Lys | Ala |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Leu | Ala | Glu | Asn | Val | Thr | Lys | Phe | Ile | His | Gly | Glu | Ala | Ala | Leu | Lys |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Asp | Ala | Ile | Arg | Ile | Ser | Lys | Ala | Leu | Phe | Ser | Gly | Asp | Leu | Lys | Ser |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Leu | Ser | Ala | Lys | Glu | Leu | Lys | Glu | Gly | Phe | Lys | Asp | Val | Pro | Gln | Val |
|     |     | 340 |     |     |     |     |     | 345 |     |     |     | 350 |     |     |     |
| Thr | Leu | Ser | Thr | Lys | Thr | Thr | Asn | Ile | Val | Glu | Ala | Leu | Ile | Glu | Thr |
|     | 355 |     |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Gly | Ile | Ala | Ser | Ser | Lys | Arg | Gln | Ala | Arg | Glu | Asp | Val | Asn | Asn | Gly |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Ala | Ile | Tyr | Ile | Asn | Gly | Glu | Arg | Gln | Gln | Ser | Val | Asp | Tyr | Glu | Leu |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |

6093 427 PRT S.epidermidis

Ser Ser Lys Asp Leu Ile Glu Asp Glu Ile Thr Ile Ile Arg Arg Gly  
                     405                    410                    415  
 Lys Lys Lys Tyr Phe Met Val Asn Tyr Gln Ser  
                     420                    425

<210> 6094  
 <211> 235  
 <212> PRT  
 <213> S.epidermidis

<400> 6094  
 Thr Cys Tyr Phe Ser Ser Asn Arg Tyr Thr Gly Gly Arg Phe Met Gln  
 1                    5                    10                    15  
 Gln Glu Thr Thr Ser Trp Tyr Lys Gln Glu Trp Phe Ile Val Leu Ser  
                     20                    25                    30  
 Leu Leu Phe Ile Phe Pro Leu Gly Leu Phe Leu Met Trp Lys Phe Ser  
                     35                    40                    45  
 Lys Trp Pro Ser Ile Ala Arg Thr Ile Ile Thr Val Ala Ile Ser Val  
                     50                    55                    60  
 Ile Val Leu Ala Ser Ile Thr Tyr Tyr Gly Asn Leu Gln Met Ile Val  
 65                    70                    75                    80  
 Pro Ala Thr Ser Asn Ser Asn Asn Glu Thr Lys Glu Thr Thr Glu Asn  
                     85                    90                    95  
 Asn Val Asn Asp Lys Asp Glu Arg Asn His Lys Thr Ala Val Glu Glu  
                     100                    105                    110  
 Thr Lys Thr Asn Tyr Asp Ser Thr Lys Glu Asn Thr Lys Glu Pro Gly  
                     115                    120                    125  
 Lys Glu Asn Glu Ser Ala Thr Arg Leu Glu Asn Ser Ala Leu Glu Lys  
                     130                    135                    140  
 Ala Lys Ser Tyr Tyr Asp Phe His Met Ser Lys Leu Gly Ile Tyr  
 145                    150                    155                    160  
 Asp Ile Leu Thr Ser Glu Tyr Gly Glu Lys Phe Asp Lys Glu Asp Ala  
                     165                    170                    175  
 Gln Tyr Ala Ile Asp His Leu Glu Ala Asp Tyr Glu Lys Asn Ala Leu  
                     180                    185                    190  
 Glu Lys Ala Lys Ser Tyr Ala Lys Asp Met His Met Ser Asn Asp Ser  
                     195                    200                    205  
 Ile Tyr Asp Leu Leu Val Ser Asn Tyr Gly Glu Lys Phe Thr Glu Ser  
                     210                    215                    220  
 Glu Ala Lys Tyr Ala Ile Glu His Leu Asp Asn  
 225                    230                    235

<210> 6095  
 <211> 427  
 <212> PRT  
 <213> S.epidermidis

<400> 6095  
 Gln Met His Leu Asn Glu Ala Phe Thr Tyr Leu Ser Ala Phe Val Leu  
 1                    5                    10                    15  
 Gly Gly Lys Phe Met Glu His Tyr Asn Arg Asp Asn Phe Glu Lys Ser  
                     20                    25                    30  
 His Thr Ser Glu Glu Leu Tyr His Arg Thr Ser Arg Ser Gln Ser Asn  
                     35                    40                    45  
 Ser Leu Lys Arg Lys Asp Phe Val Val Ser Phe Ile Ala Ser Ala Ile  
                     50                    55                    60

Val Gly Ser Ala Val Gly Leu Tyr Tyr Lys Asn Lys Ile Tyr Lys Lys  
 65 70 75 80  
 Thr Asp Glu Leu Lys Glu Lys Glu Gln Asp Leu Arg Ser Lys Val Glu  
 85 90 95  
 Asn Tyr Arg Gln Arg Ala Glu Asp Thr Val Val Ser Val Lys Ser Lys  
 100 105 110  
 Val Glu Gln Leu Lys Tyr Asp Ser Lys Asp Asn Ile His Ala Asp Glu  
 115 120 125  
 Leu Gln Ala Gln Lys Ala Ala Ile Gln Arg Glu Thr Asp Leu Ala Asp  
 130 135 140  
 Glu Ser Pro Glu Ala Gln Ala Ile Gln Glu Ala Lys Lys Glu Thr Lys  
 145 150 155 160  
 Gln Val Asp Asp Val Arg Pro Ser Ala Thr Glu Leu Ala Ala Gln Gln  
 165 170 175  
 Asn Ala Ile Gln His Glu Thr Asp Leu Ala Asp Glu Ser Pro Glu Ala  
 180 185 190  
 Gln Ala Ile Gln Glu Ala Lys Ser Glu Val Asp Ser Asn Asn Lys Thr  
 195 200 205  
 Ser Thr Thr His Ile Asp Ser Glu Lys Glu Pro Ser Ala Glu Glu Ile  
 210 215 220  
 Ala Ile Ala Gln Thr Ala Val Lys Glu Glu Ala Arg Asn His Asp Leu  
 225 230 235 240  
 Ala Asn Leu Ser Ala Ser Gly Glu Asp Thr Lys Ser Lys Ser Glu Thr  
 245 250 255  
 Glu Thr Glu Lys Leu Ala Ala Ala Lys Ala Lys Lys Asp Arg Ile  
 260 265 270  
 Asn Asn Asn Asn Glu Val Ala Ser Asn Thr Lys Asn Leu Met Gln Glu  
 275 280 285  
 Glu Ala Ile Lys Ala Ser Asn Asn Ser Asp Val Pro Asn Leu Val Thr  
 290 295 300  
 Asn Leu Asn Gln Ser Gln Ala Ser Asp Thr Asn Ser Val Ala Tyr Arg  
 305 310 315 320  
 Leu Ala Gln Ala Ala Lys Glu Lys Arg Ser Lys Leu Thr Asn Gly Ser  
 325 330 335  
 Lys Glu Thr Gln Leu Thr Glu Ala Leu Leu Lys Glu Pro Ser Ile Ala  
 340 345 350  
 Lys Ala Gln Thr Lys Leu Lys Arg Ile Pro Thr Leu Ile Thr Glu Ser  
 355 360 365  
 Lys Lys His Ser Asn Asn Pro His Ser Gln Lys Asn Ser Asn Gln Thr  
 370 375 380  
 Lys Asn Ile Thr Ala Thr Lys Glu Asp Ser Lys Gly Lys Gln Gln His  
 385 390 395 400  
 Thr Pro Asn Gln Asn Lys Arg Asn Lys Gln Gln Lys Val Glu Lys Thr  
 405 410 415  
 Ser Ser Lys Ile Glu Lys Arg Thr Phe Asn Asp  
 420 425

&lt;210&gt; 6096

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6096

Thr Leu Asn Phe Asn Phe Asn Ile Ile Cys Gln Val Leu Tyr Tyr Asn  
 1 5 10 15  
 Tyr Tyr Leu Lys Leu Cys His Pro Ile Pro Phe Thr Ile Ile Lys Ile

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<210> 6097
<211> 90
<212> PRT
<213> S.epidermidis
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<210> 6098
<211> 307
<212> PRT
<213> S.epidermidis
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|            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 6098 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Arg        | Ser | Val | Val | Leu | Met | Asp | Phe | Ser | Ser | Pro | Thr | Val | Ile | Gly | Leu |
| 1          |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Ile        | Val | Ala | Ile | Leu | Val | Ala | Val | Leu | Phe | Phe | Ile | Leu | Phe | Leu | Ile |
|            |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala        | Asn | His | Ser | Lys | Lys | Lys | Val | Lys | Asn | Gln | Thr | Glu | Ala | His | Tyr |
|            |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Lys        | Glu | Lys | Glu | Gln | His | Leu | Lys | Glu | Ser | His | Glu | Glu | Ala | Leu | Glu |
|            | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Lys        | Glu | Arg | Val | Glu | Asn | Lys | Lys | Val | Val | Thr | Lys | Gln | Lys | Glu | Asp |
| 65         |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Phe        | Asp | Val | Thr | Val | Ser | Asn | Lys | Asn | Arg | Glu | Ile | Asp | Ala | Leu | Lys |
|            |     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Leu        | Phe | Ser | Lys | Asn | His | Ser | Glu | Tyr | Val | Thr | Asp | Met | Arg | Leu | Ile |
|            |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly        | Ile | Arg | Glu | Arg | Leu | Val | Asn | Glu | Lys | Arg | Ile | Arg | Pro | Glu | Asp |
|            |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Met        | His | Ile | Met | Ala | Asn | Ile | Phe | Leu | Pro | Ser | Asn | Glu | Leu | Thr | Asn |
|            | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ile        | Glu | Arg | Val | Ser | His | Leu | Val | Leu | Thr | Arg | Thr | Gly | Leu | Tyr | Ile |
| 145        |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Ile        | Asp | Ser | Gln | Leu | Leu | Lys | Gly | His | Val | Tyr | Asn | Gly | Ile | Ser | Gly |
|            |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Ala        | Gln | Phe | Lys | Glu | Leu | Pro | Thr | Met | Ser | Gln | Val | Phe | Asp | Thr | Leu |
|            |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Asp        | Leu | Asp | Ser | Ser | Gln | Pro | Gln | Thr | Leu | Val | Leu | Asp | Gln | Asn | Glu |



195                      200                      205  
 Asp Gln His Ser Leu Ser Phe Val Asn Tyr Ser Asp Lys Ile Lys His  
 210                      215                      220  
 Ile Glu Lys Leu Ala Gly Asp Leu Gln Asn Glu Leu Asn Thr Lys Tyr  
 225                      230                      235                      240  
 Thr Pro Thr Ser Ile Leu Tyr Phe Asn Pro Lys Lys Asp Asn Asp Val  
 245                      250                      255  
 Thr Ile Ser His Tyr Thr Gln Ser Ser Asn Val Lys Val Leu Val Gly  
 260                      265                      270  
 Pro Glu Gln Leu Asp Glu Phe Phe Asn Lys Phe Val Phe His Gly Arg  
 275                      280                      285  
 Ile Gln Tyr Asn Val Asp Asp Leu Gln Asp Ile Met Val Lys Ile Glu  
 290                      295                      300  
 Ser Phe Asn  
 305

<210> 6099

<211> 235

<212> PRT

<213> S.epidermidis

<400> 6099

Ser Glu Asp Val Ala Met Arg Leu Asp Lys Phe Leu Ala Asn Met Gly  
 1                      5                      10                      15  
 Val Gly Thr Arg Ser Glu Val Lys Gln Leu Leu Lys Lys Gly Ser Val  
 20                      25                      30  
 Lys Val Asn Gln Asn Ile Val Lys Leu Pro Lys Leu His Val Asn Pro  
 35                      40                      45  
 Asn Ser Asp Glu Ile Met Val Asn Asp Glu Val Val Ser Tyr Ile Asp  
 50                      55                      60  
 Lys Val Tyr Ile Met Leu Asn Lys Pro Lys Gly Tyr Ile Ser Ala Thr  
 65                      70                      75                      80  
 Glu Asp Glu Val His Pro Thr Ile Ile Asp Leu Ile Pro Glu Tyr Ala  
 85                      90                      95  
 His Leu Asn Ile Phe Pro Val Gly Arg Leu Asp Lys Asp Thr Glu Gly  
 100                      105                      110  
 Leu Leu Leu Val Thr Asn Asp Gly Gln Phe Asn His Glu Val Met Asn  
 115                      120                      125  
 Pro Asn Lys His Val Ser Lys Thr Tyr Glu Val Tyr Ser Lys His Pro  
 130                      135                      140  
 Ile Thr Gln Phe Asp Ile Asp Lys Phe Lys Ser Gly Ile Glu Leu Ser  
 145                      150                      155                      160  
 Asp Gly Lys Leu Lys Pro Ala Ile Leu Lys Lys Val Asp Asn Tyr Val  
 165                      170                      175  
 Ser His Val Thr Ile Tyr Glu Gly Lys Tyr His Gln Val Lys Arg Met  
 180                      185                      190  
 Phe His Ser Ile Glu Asn Glu Val Leu Glu Leu Lys Arg Ile Lys Ile  
 195                      200                      205  
 Ala Gln Leu Glu Leu Asp His Asn Leu Asp Leu Gly Ser Tyr Arg Leu  
 210                      215                      220  
 Leu Thr Gln Ile Asp Phe Asp Asn Leu Lys Asn  
 225                      230                      235

<210> 6100

<211> 62

<212> PRT

<213> S.epidermidis

<400> 6100

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Phe Leu Cys Val Tyr Tyr His Phe Val Asp Val Asp Ile Lys Ile Leu
1          5          10          15
Thr Ile Leu Leu Lys Gly Met Phe Phe Ile Leu Ala Glu Ile Cys Asn
          20          25          30
Ser Leu Phe Lys Thr Phe Cys Ile Cys Phe Ile Ser Phe Ile Ala Ile
          35          40          45
Glu Met Phe Ile Leu Leu Ala Asp Phe Val Ile Val Leu Leu Lys
          50          55          60

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<210> 6101

<211> 63

<212> PRT

<213> S.epidermidis

<400> 6101

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Asn Ile Ser Val Ser Gly Phe Phe Ile Asn Asn Lys Phe Lys Ile Asn
1          5          10          15
Leu Phe Leu Ser Tyr Leu Glu His Ser Leu Cys Leu Asn Phe Ile Phe
          20          25          30
Leu Leu Leu Lys Phe Pro Leu Arg Lys Tyr Met Leu Lys Leu Leu Phe
          35          40          45
Arg Ile Ile Val Lys Gly Lys Phe Ile Thr Phe Ile Lys Ile Met
          50          55          60

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<210> 6102

<211> 136

<212> PRT

<213> S.epidermidis

<400> 6102

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Arg Leu Phe Phe Cys Thr Ser Leu Ala Lys Arg Lys Tyr Tyr Ser Phe
1          5          10          15
Asn Lys Trp Thr Asn Ser Thr Ile Thr Ile Trp Lys Gly Ile Leu Ile
          20          25          30
Phe Met Ile Lys Leu Glu Ser Glu Gln Gln Phe Glu Glu Leu Lys Lys
          35          40          45
Gly Tyr Thr Val Phe Glu Phe Thr Ala Gly Trp Cys Pro Asp Cys Lys
          50          55          60
Val Ile Glu Pro Asp Leu Pro Lys Leu Glu Lys Lys Tyr Ser Gln Leu
65          70          75          80
Gln Phe Val Ser Val Asp Arg Asp Gln Phe Ile Asp Ile Cys Val Gln
          85          90          95
Asn Asp Ile Leu Gly Ile Pro Ser Phe Leu Ile Phe Lys Glu Gly Gln
          100          105          110
Leu Leu Gly Ser Tyr Ile Gly Lys Glu Arg Lys Ser Ile Asp Gln Ile
          115          120          125
Asp Gln Phe Leu Ser Gln His Ile
          130          135

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<210> 6103

<211> 204

<212> PRT

<213> S.epidermidis

&lt;400&gt; 6103

Arg Ser Val Val Asn Met Ala Met Asn Phe Lys Val Phe Asp Asn Ser  
 1 5 10 15  
 Glu Lys Val Ala Glu Tyr Thr Ala Asp Ile Leu Arg Lys Gln Phe Asn  
 20 25 30  
 Asn Asn Pro Thr Thr Ile Ala Gly Phe His Leu Ser Lys Glu His Ala  
 35 40 45  
 Pro Val Phe Asp Glu Leu Lys Lys Asn Val Glu Asn His Thr Val Asp  
 50 55 60  
 Phe Ser Gln Ile Asn Ile Leu Asp Tyr Asp Asn His Ser Tyr Tyr  
 65 70 75 80  
 Glu Ala Leu Gly Val Pro Thr Gly Gln Ile Tyr Ser Ile Ser Tyr Glu  
 85 90 95  
 Asn Asp Ala Ile Asp Phe Ile Ser Asp Lys Ile Lys Thr Lys Glu Asn  
 100 105 110  
 Lys Gly Lys Leu Thr Met Gln Val Leu Thr Ile Asp Glu Asn Gly Lys  
 115 120 125  
 Leu Asp Ile Ser Val Arg Gln Gly Leu Met Glu Ala Arg Glu Ile Phe  
 130 135 140  
 Leu Val Ile Thr Gly Ala Asn Lys Arg Asp Met Val Glu Lys Leu Tyr  
 145 150 155 160  
 Arg Glu Asn Gly Lys Thr Ser Phe Glu Pro Ser Asp Leu Lys Ala His  
 165 170 175  
 Arg Met Val Asn Val Ile Leu Asp Lys Glu Ala Ala Ala Gly Leu Pro  
 180 185 190  
 Glu Asp Val Lys Glu Tyr Phe Thr Ala Arg Phe Ala  
 195 200

&lt;210&gt; 6104

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6104

Ser Leu Lys Val Ile Thr Leu Ser Asn Pro Leu Asp Ala His His Leu  
 1 5 10 15  
 Phe Trp Ala Lys Gly Lys Ser Thr Asp Ile Val Lys Thr Thr Pro Ser  
 20 25 30  
 Ser Ala Glu Ala Ser Ser Leu Asn Phe Arg Val  
 35 40

&lt;210&gt; 6105

&lt;211&gt; 337

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6105

Leu Phe Arg Val Asn Ser Tyr Tyr Gln Ser Arg Met Asp Thr Phe Leu  
 1 5 10 15  
 Asn Arg Lys Gly Tyr Phe Met Ser Glu Glu Asn Thr Ile Met Glu Arg  
 20 25 30  
 Leu Phe His Lys Leu Asp Asp Lys Ala Lys Thr Leu Asn Lys Glu Asn  
 35 40 45  
 Gly Gln Ser Phe Ile Glu Asn Leu Gly Leu Ala Met Glu Asp Ile Tyr  
 50 55 60

Thr Asn Gln Arg Glu Leu Leu Glu Gln Ala Thr Leu Gln Asp Arg Arg  
 65 70 75 80  
 Lys Ala Phe Gln Phe Ala Tyr Leu Ser Leu Leu Gln Glu Glu Asn Ile  
 85 90 95  
 Gln Ala Asn His Gln Ile Thr Pro Asp Ser Ile Gly Leu Ile Leu Gly  
 100 105 110  
 Phe Leu Val Gln Arg Phe Leu Glu His Lys Lys Glu Met His Ile Val  
 115 120 125  
 Asp Ile Ala Ser Gly Ala Gly His Leu Ser Ala Ala Val Lys Glu Val  
 130 135 140  
 Leu Ser Asp Lys Thr Ile Met His His Leu Ile Glu Val Asp Pro Val  
 145 150 155 160  
 Leu Ser Arg Val Ser Val His Leu Ala Asn Phe Leu Glu Ile Pro Phe  
 165 170 175  
 Asp Val Tyr Pro Gln Asp Ala Ile Met Pro Leu Pro Leu Glu Glu Ala  
 180 185 190  
 Asp Val Val Ile Gly Asp Phe Pro Ile Gly Tyr Tyr Pro Leu Asp Glu  
 195 200 205  
 Arg Ser Arg Glu Met Lys Leu Gly Phe Glu Lys Gly His Ser Tyr Ser  
 210 215 220  
 His His Leu Leu Ile Glu Gln Ser Ile Asn Ala Leu Lys Gly Ala Gly  
 225 230 235 240  
 Tyr Ala Phe Leu Val Val Pro Ser His Leu Phe Glu Asp Asp Lys Val  
 245 250 255  
 Lys Gln Leu Glu Asn Phe Ile Ala Thr Glu Thr Glu Met Gln Ala Phe  
 260 265 270  
 Leu Asn Leu Pro Lys Thr Leu Phe Lys Asn Glu Lys Ala Arg Lys Ser  
 275 280 285  
 Ile Leu Ile Leu Gln Lys Lys Ser Gly Glu Thr Arg Pro Val Glu  
 290 295 300  
 Val Leu Leu Ala Asn Ile Pro Asp Phe Lys Asn Pro Gln Gln Phe Gln  
 305 310 315 320  
 Gly Phe Ile Ser Glu Leu Asn Gln Trp Ile Val Thr Asn His Thr Lys  
 325 330 335  
 Lys

&lt;210&gt; 6106

&lt;211&gt; 121

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6106

Leu Lys Gly Val Gln Arg Leu Met Ala Val Asn Leu Tyr Asp Tyr Ala  
 1 5 10 15  
 Asn Gln Leu Glu Gln Ala Leu Arg Asp Ser Asp Glu Tyr Lys Ala Ile  
 20 25 30  
 Lys Asp Ala Phe Ala Lys Val Lys Glu Asn Glu Glu Ser Lys Lys Leu  
 35 40 45  
 Phe Asp Glu Phe Arg Glu Thr Gln Met Ser Phe Gln Gln Lys Gln Met  
 50 55 60  
 Gln Gly Glu Glu Ile Pro Glu Glu Asp Leu Gln Lys Ala Gln Glu Gln  
 65 70 75 80  
 Ala Gln Ala Ile Glu Lys Asp Glu Asn Ile Ser Glu Leu Met Asn Ala  
 85 90 95  
 Glu Gln Lys Met Ser Gln Val Phe Gln Glu Ile Asn Gln Ile Ile Val

100                      105                      110  
 Lys Pro Leu Asp Glu Ile Tyr Ala Asp  
       115                      120

<210> 6107  
 <211> 1067  
 <212> PRT  
 <213> S.epidermidis

<400> 6107  
 Glu Thr Met Val Ala His Leu Asn Ile His Thr Ser Phe Asp Leu Leu  
 1                      5                      10                      15  
 Asp Ser Ser Leu Arg Ile Asp Ala Leu Ile Asp Lys Ala Lys Lys Glu  
       20                      25                      30  
 Gly Tyr Arg Ala Leu Ala Ile Thr Asp Thr Asn Val Leu Tyr Gly Tyr  
       35                      40                      45  
 Pro Lys Phe Tyr Asp Ala Cys Ile Ala Ala His Ile His Pro Ile Phe  
       50                      55                      60  
 Gly Met Thr Ile Tyr Leu Thr Asp Gly Leu Tyr Thr Ile Glu Thr Val  
 65                      70                      75                      80  
 Val Leu Ala Lys Asn Asn Gln Gly Leu Lys Ser Leu Tyr Gln Ile Ser  
       85                      90                      95  
 Ser Ala Ile Met Met Arg Asn Lys Glu Glu Val Pro Ile Glu Trp Leu  
       100                      105                      110  
 Lys Arg Tyr Asp Glu His Leu Ile Ile Ile Phe Lys Glu Ala Glu Leu  
       115                      120                      125  
 Ser His Lys Gln Ile Ile Asp Ala Phe Glu Gly Lys Lys Glu Leu Tyr  
       130                      135                      140  
 Leu Asn His Asn Ser Asn Asn Thr Leu Thr Gly Lys Arg Val Trp Met  
 145                      150                      155                      160  
 Gln Ser Ala Arg Tyr Leu Asn Glu Asp Asp Ala Glu Thr Ile Pro Ala  
       165                      170                      175  
 Leu His Ala Ile Arg Asp Asn Thr Lys Leu Asp Leu Ile His Glu Lys  
       180                      185                      190  
 Glu Thr Leu Asp Glu His Phe Pro Ser Ile Glu Glu Leu Gln Thr Leu  
       195                      200                      205  
 Asn Leu Ser Glu Asp Met Ile Thr Asn Ala Asn Glu Ile Glu Glu Leu  
       210                      215                      220  
 Cys Gln Ala Glu Ile Ala Tyr His Gln Ser Leu Leu Pro Gln Phe Val  
 225                      230                      235                      240  
 Thr Pro Asn Gly Glu Thr Ser Lys Asp Tyr Leu Trp Thr Ile Leu Ile  
       245                      250                      255  
 His Arg Leu Arg Glu Trp Glu Leu Asn Asp Lys Thr Tyr Phe Asn Arg  
       260                      265                      270  
 Leu Lys His Glu Tyr Lys Ile Ile Thr Asp Met Gly Phe Glu Asp Tyr  
       275                      280                      285  
 Phe Leu Ile Val Ser Asp Leu Ile His Phe Ala Lys Thr His Glu Val  
       290                      295                      300  
 Met Val Gly Pro Gly Arg Gly Ser Ser Ala Gly Ser Leu Val Ser Tyr  
 305                      310                      315                      320  
 Leu Leu Gly Ile Thr Thr Ile Asp Pro Leu Lys Tyr Asn Leu Leu Phe  
       325                      330                      335  
 Glu Arg Phe Leu Asn Pro Glu Arg Val Thr Met Pro Asp Ile Asp Ile  
       340                      345                      350  
 Asp Phe Glu Asp Thr Arg Arg Glu Lys Val Ile Lys Tyr Val Gln Asp  
       355                      360                      365

100 105 110  
 115 120  
 130 135 140  
 145 150 155 160  
 165 170 175  
 180 185 190  
 195 200 205  
 210 215 220  
 225 230 235 240  
 245 250 255  
 260 265 270  
 275 280 285  
 290 295 300  
 305 310 315 320  
 325 330 335  
 340 345 350  
 355 360 365

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Tyr | Gly | Glu | His | His | Val | Ser | Gly | Ile | Val | Thr | Phe | Gly | His | Leu |
| 370 |     |     |     |     |     | 375 |     |     |     | 380 |     |     |     |     |     |
| Leu | Ala | Arg | Ala | Val | Ala | Arg | Asp | Val | Gly | Arg | Ile | Met | Gly | Phe | Asp |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Glu | Thr | Ser | Leu | Asn | Glu | Ile | Ser | Lys | Leu | Ile | Pro | His | Lys | Leu | Gly |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Ile | Thr | Leu | Glu | Glu | Ala | Tyr | Gln | Lys | Pro | Glu | Phe | Lys | Ala | Phe | Val |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| His | Arg | Asn | His | Arg | Asn | Glu | Arg | Trp | Phe | Glu | Val | Ser | Lys | Lys | Leu |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Glu | Gly | Leu | Pro | Arg | His | Thr | Ser | Thr | His | Ala | Ala | Gly | Ile | Ile | Ile |
|     |     | 450 |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |
| Asn | Asp | Gln | Pro | Leu | Phe | Lys | Phe | Ala | Pro | Leu | Thr | Thr | Gly | Asp | Thr |
| 465 |     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |
| Gly | Leu | Leu | Thr | Gln | Trp | Thr | Met | Thr | Glu | Ala | Glu | Arg | Ile | Gly | Leu |
|     |     |     |     | 485 |     |     |     |     | 490 |     |     |     |     | 495 |     |
| Leu | Lys | Ile | Asp | Phe | Leu | Gly | Leu | Arg | Asn | Leu | Ser | Ile | Ile | His | Gln |
|     |     |     | 500 |     |     |     |     | 505 |     |     |     |     | 510 |     |     |
| Ile | Ile | Leu | Gln | Val | Lys | Lys | Asp | Leu | Asn | Ile | Asn | Ile | Asp | Ile | Glu |
|     |     | 515 |     |     |     |     | 520 |     |     |     |     | 525 |     |     |     |
| Ala | Ile | Pro | Tyr | Asp | Asp | Lys | Lys | Val | Phe | Asp | Leu | Leu | Ser | Asn | Gly |
|     |     | 530 |     |     |     | 535 |     |     |     |     | 540 |     |     |     |     |
| Asp | Thr | Thr | Gly | Ile | Phe | Gln | Leu | Glu | Ser | Asp | Gly | Val | Arg | Ser | Val |
| 545 |     |     |     |     | 550 |     |     |     |     | 555 |     |     |     |     | 560 |
| Leu | Lys | Arg | Leu | Gln | Pro | Glu | His | Phe | Glu | Asp | Ile | Val | Ala | Val | Thr |
|     |     |     |     | 565 |     |     |     |     | 570 |     |     |     |     | 575 |     |
| Ser | Leu | Tyr | Arg | Pro | Gly | Pro | Met | Glu | Glu | Ile | Pro | Thr | Tyr | Ile | Thr |
|     |     | 580 |     |     |     |     |     | 585 |     |     |     |     | 590 |     |     |
| Arg | Arg | His | Asn | Pro | Asn | Gln | Val | Ala | Tyr | Leu | His | Pro | Asp | Leu | Glu |
|     |     | 595 |     |     |     |     | 600 |     |     |     |     | 605 |     |     |     |
| Pro | Ile | Leu | Lys | Asn | Thr | Tyr | Gly | Val | Ile | Ile | Tyr | Gln | Glu | Gln | Ile |
|     |     | 610 |     |     |     | 615 |     |     |     |     | 620 |     |     |     |     |
| Met | Leu | Ile | Ala | Ser | Gln | Val | Ala | Gly | Phe | Ser | Tyr | Gly | Glu | Ala | Asp |
| 625 |     |     |     |     | 630 |     |     |     |     | 635 |     |     |     |     | 640 |
| Ile | Leu | Arg | Arg | Ala | Met | Ser | Lys | Lys | Asn | Arg | Ala | Ile | Leu | Glu | Ser |
|     |     |     |     | 645 |     |     |     |     | 650 |     |     |     |     | 655 |     |
| Glu | Arg | Gln | His | Phe | Ile | Asp | Gly | Ala | Lys | Asn | Asn | Gly | Tyr | Gly | Glu |
|     |     |     | 660 |     |     |     |     | 665 |     |     |     |     | 670 |     |     |
| Gln | Ile | Ser | Lys | Gln | Ile | Phe | Asp | Leu | Ile | Leu | Lys | Phe | Ala | Asp | Tyr |
|     |     | 675 |     |     |     |     | 680 |     |     |     |     | 685 |     |     |     |
| Gly | Phe | Pro | Arg | Ala | His | Ala | Val | Ser | Tyr | Ser | Lys | Ile | Ala | Tyr | Ile |
|     |     | 690 |     |     |     | 695 |     |     |     |     | 700 |     |     |     |     |
| Met | Ser | Tyr | Leu | Lys | Val | His | Tyr | Pro | His | Tyr | Phe | Tyr | Ala | Asn | Ile |
| 705 |     |     |     |     | 710 |     |     |     |     | 715 |     |     |     |     | 720 |
| Leu | Ser | Asn | Val | Ile | Gly | Ser | Glu | Lys | Lys | Thr | Ala | Ala | Met | Ile | Asp |
|     |     |     |     | 725 |     |     |     |     | 730 |     |     |     |     | 735 |     |
| Glu | Ala | Lys | His | Gln | Arg | Ile | Ser | Ile | Leu | Pro | Pro | Asn | Ile | Asn | Gln |
|     |     |     | 740 |     |     |     |     | 745 |     |     |     |     | 750 |     |     |
| Ser | His | Trp | Tyr | Tyr | Lys | Ala | Ser | Asn | Lys | Gly | Ile | Tyr | Leu | Ser | Leu |
|     |     | 755 |     |     |     |     | 760 |     |     |     |     | 765 |     |     |     |
| Gly | Thr | Ile | Lys | Gly | Ile | Gly | Tyr | Gln | Ser | Val | Lys | Leu | Ile | Ile | Asp |
|     |     | 770 |     |     |     | 775 |     |     |     |     | 780 |     |     |     |     |
| Glu | Arg | Gln | Gln | Asn | Gly | Pro | Tyr | Arg | Asp | Phe | Phe | Asp | Phe | Ser | Arg |
| 785 |     |     |     |     | 790 |     |     |     |     | 795 |     |     |     |     | 800 |
| Arg | Ile | Pro | Lys | Arg | Val | Lys | Asn | Arg | Lys | Leu | Leu | Glu | Ser | Leu | Ile |
|     |     |     |     | 805 |     |     |     |     | 810 |     |     |     |     | 815 |     |

Leu Val Gly Ala Phe Asp Thr Phe Gly Lys Thr Arg Ala Thr Leu Leu  
                   820                  825                  830  
 Gln Ala Ile Asp Gln Val Leu Asp Leu Asn Ser Asp Val Glu Gln Asp  
                   835                  840                  845  
 Glu Met Leu Phe Asp Leu Leu Thr Pro Lys Gln Ser Tyr Glu Glu Lys  
                   850                  855                  860  
 Glu Glu Leu Pro Asp Gln Leu Leu Ser Asp Tyr Glu Lys Glu Tyr Leu  
                   865                  870                  875                  880  
 Gly Phe Tyr Ile Ser Lys His Pro Val Glu Lys Lys Phe Glu Lys Lys  
                   885                  890                  895  
 Gln Tyr Leu Gly Ile Phe Gln Leu Ser Asn Gly Ser His Tyr Gln Pro  
                   900                  905                  910  
 Ile Leu Val Gln Phe Asp His Ile Lys Gln Ile Arg Thr Lys Asn Gly  
                   915                  920                  925  
 Gln Asn Met Ala Phe Val Thr Met Asn Asp Gly Arg Thr Met Met Asp  
                   930                  935                  940  
 Gly Val Ile Phe Pro Asp Lys Phe Lys Lys Tyr Glu Thr Ser Ile Ser  
                   945                  950                  955                  960  
 Lys Glu Gln Met Tyr Ile Val Leu Gly Lys Phe Glu Lys Arg Asn Gln  
                   965                  970                  975  
 Gln Met Gln Leu Ile Ile Asn Gln Leu Phe Glu Val Glu Ala Tyr Glu  
                   980                  985                  990  
 Gln Thr Lys Leu Ser Asn Ser Lys Lys Val Ile Leu Arg Asn Val Thr  
                   995                  1000                  1005  
 His Leu Glu Pro Gln Phe Glu His Ser Lys Val Glu Ser Asn Glu Gln  
                   1010                  1015                  1020  
 His Ala Leu Asn Ile Tyr Gly Phe Asp Glu Ser Ala Asn Lys Met Thr  
                   1025                  1030                  1035                  1040  
 Met Leu Gly Gln Ile Glu Arg Gln Arg Gln Asn Phe Asp Leu Leu Ile  
                   1045                  1050                  1055  
 Gln Thr Tyr Ser Pro Ala Asp Ile Arg Phe Ile  
                   1060                  1065

&lt;210&gt; 6108

&lt;211&gt; 428

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6108

Asn Met Glu Val Asn Cys Met Ser Ala Glu Lys Ile Thr Gln Ser Lys  
 1                  5                  10                  15  
 Asp Gly Leu Asn Val Pro Asn Glu Pro Ile Ile Pro Phe Ile Ile Gly  
                   20                  25                  30  
 Asp Gly Ile Gly Pro Asp Ile Trp Lys Ala Ala Ser Arg Val Ile Asp  
                   35                  40                  45  
 Ala Ala Val Glu Lys Ala Tyr Asn Gly Glu Lys Arg Ile Glu Trp Lys  
                   50                  55                  60  
 Glu Val Leu Ala Gly Gln Lys Ala Tyr Asp Glu Thr Gly Glu Trp Leu  
                   65                  70                  75                  80  
 Pro Gln Glu Thr Leu Glu Thr Ile Lys Glu Tyr Leu Ile Ala Val Lys  
                   85                  90                  95  
 Gly Pro Leu Thr Thr Pro Ile Gly Gly Gly Ile Arg Ser Leu Asn Val  
                   100                  105                  110  
 Ala Leu Arg Gln Glu Leu Asp Leu Phe Thr Cys Leu Arg Pro Val Arg  
                   115                  120                  125  
 Trp Phe Lys Gly Val Pro Ser Pro Val Lys Arg Pro Glu Asp Val Asp

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      130              135              140
Met Val Ile Phe Arg Glu Asn Thr Glu Asp Ile Tyr Ala Gly Ile Glu
145              150              155              160
Phe Lys Gln Gly Thr Ser Glu Val Lys Lys Val Ile Asp Phe Leu Gln
      165              170              175
Asn Glu Met Gly Ala Thr Asn Ile Arg Phe Pro Glu Thr Ser Gly Ile
      180              185              190
Gly Ile Lys Pro Val Ser Lys Glu Gly Thr Glu Arg Leu Val Arg Ala
      195              200              205
Ala Ile Gln Tyr Ala Leu Asp Asn Asn Arg Lys Ser Val Thr Leu Val
      210              215              220
His Lys Gly Asn Ile Met Lys Phe Thr Glu Gly Ser Phe Lys Gln Trp
225              230              235              240
Gly Tyr Asp Leu Ala His Asn Glu Phe Gly Asp Lys Val Phe Thr Trp
      245              250              255
Gln Gln Tyr Asp Glu Ile Val Glu Gln Lys Gly Lys Asp Ala Ala Asn
      260              265              270
Glu Ala Gln Ser Lys Ala Glu Gln Glu Gly Lys Ile Ile Ile Lys Asp
      275              280              285
Ser Ile Ala Asp Ile Phe Leu Gln Gln Ile Leu Thr Arg Pro Ala Glu
      290              295              300
His Asp Val Val Ala Thr Met Asn Leu Asn Gly Asp Tyr Ile Ser Asp
305              310              315              320
Ala Leu Ala Ala Gln Val Gly Gly Ile Gly Ile Ala Pro Gly Ala Asn
      325              330              335
Ile Asn Tyr Glu Thr Gly His Ala Ile Phe Glu Ala Thr His Gly Thr
      340              345              350
Ala Pro Lys Tyr Ala Asp Leu Asn Lys Val Asn Pro Ser Ser Glu Ile
      355              360              365
Leu Ser Ser Val Leu Met Leu Glu His Leu Gly Trp Gln Lys Ala Ala
      370              375              380
Asp Lys Ile Thr Asp Ser Ile Glu Ala Thr Ile Ala Ser Lys Ile Val
385              390              395              400
Thr Tyr Asp Phe Ala Arg Leu Met Asp Gly Ala Lys Glu Val Ser Thr
      405              410              415
Ser Asp Phe Ala Asp Glu Leu Ile Lys Asn Ile Arg
      420              425

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&lt;210&gt; 6109

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6109

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Met Asn Leu Phe Tyr Asn Pro Lys Gly Val Gly Asp Val Ala Phe Ile
1      5      10      15
Gln Ile Glu Pro Ser Val Gly Pro Phe Glu Tyr Glu Gln Lys His Gly
      20      25      30
Val Val Glu Ile Lys Lys Glu Asn Glu Val Val Gly Tyr Asn Ile Phe
      35      40      45
Asn Val Ser Asn Asn Val Thr Ile Asn Asp Asn Gly His Ile Lys Leu
      50      55      60
Thr Thr Glu Leu Ile Lys Asp Leu Gln Gln Leu Ile Thr Glu Ala Gly
65      70      75      80
Phe Asp Tyr Gln Leu Asp Thr Asp Val Ser Pro Lys Phe Val Val Gly
      85      90      95

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Tyr Val Glu Thr Lys Glu Lys His Pro Asn Ala Asp Lys Leu Ser Val  
                   100                  105                  110  
 Leu Asn Val Asn Val Gly Thr Glu Lys Leu Gln Ile Val Cys Gly Ala  
                   115                  120                  125  
 Pro Asn Val Glu Ser Gly Gln Lys Val Val Val Ala Lys Ser Trp Gly  
                   130                  135                  140  
 Arg Tyr Ala Lys Arg Asn Gly Asn  
 145                  150

<210> 6110

<211> 243

<212> PRT

<213> S.epidermidis

<400> 6110

Gly Ile Leu Leu Lys Asp Ile Thr Phe Arg Arg Val Thr Leu Met Lys  
 1                  5                  10                  15  
 Leu Ser Phe His Gly Gln Ser Thr Ile Tyr Phe Glu Gly Asn Gly Lys  
                   20                  25                  30  
 Lys Val Ile Val Asp Pro Phe Ile Ser Gly Asn Asp Lys Cys Asp Leu  
                   35                  40                  45  
 Asp Glu Gln Thr Leu Glu Val Asp Tyr Ile Ile Leu Thr His Gly His  
                   50                  55                  60  
 Ala Asp His Phe Gly Asp Val Val Glu Leu Ala Asn Arg Asn His Ala  
 65                  70                  75                  80  
 Thr Val Ile Gly Ser Ala Glu Leu Gln Gly Tyr Leu Ser Thr Tyr His  
                   85                  90                  95  
 Gly Val Glu Asn Val His Gly Met Asn Ile Gly Gly Lys Ala Lys Phe  
                   100                  105                  110  
 Asp Phe Gly Thr Val Lys Phe Val Gln Ala Phe His Ser Ser Ser Phe  
                   115                  120                  125  
 Thr His Asp Asn Gly Val Pro Val Tyr Leu Gly Met Pro Met Gly Ile  
                   130                  135                  140  
 Ile Val Glu Ala Glu Gly Lys Thr Ile Tyr His Thr Gly Asp Thr Gly  
 145                  150                  155                  160  
 Leu Phe Ser Asp Met Lys Leu Ile Ala Asp Arg His Pro Val Asp Val  
                   165                  170                  175  
 Cys Phe Val Pro Ile Gly Asp Asn Phe Thr Met Gly Ile Glu Asp Ala  
                   180                  185                  190  
 Ser Tyr Ala Ile Asn Glu Phe Ile Lys Pro Thr Ile Ser Val Pro Ile  
                   195                  200                  205  
 His Tyr Asn Thr Phe Pro Leu Ile Glu Gln Asp Pro Glu Gln Phe Lys  
                   210                  215                  220  
 Asp Ala Val Gln Val Gly Glu Val Gln Ile Leu Lys Pro Gly Glu Ser  
 225                  230                  235                  240  
 Val Glu Phe

<210> 6111

<211> 148

<212> PRT

<213> S.epidermidis

<400> 6111

Ser Cys Ile Phe Leu Val Ile Leu Gly Met Lys Tyr Tyr Tyr Asn Tyr  
 1                  5                  10                  15

Pro Thr Asn Lys Val Arg Arg Ile Ile Met Lys Val Ser Arg Ile Leu  
                   20                  25                  30  
 Phe Gly Leu Gly Val Gly Ala Val Ala Gly Phe Ala Val Ala Leu Arg  
                   35                  40                  45  
 His Arg Asp Asn Gln Ser Val Lys Asn His Thr Ile Asp Ala Ser Gln  
                   50                  55                  60  
 Pro Thr Gly Ala Gln Ser Glu Leu Gln Arg Glu Ile Glu Asn Met Lys  
 65                  70                  75                  80  
 Gln Ser Phe Asn Asp Ile Leu Asn Tyr Gly Ser Gln Ile Lys Asn Glu  
                   85                  90                  95  
 Ser Ile Glu Phe Gly Ser Ser Ile Gly Glu Glu Phe Lys Gly Leu Ile  
                   100                  105                  110  
 Gly Asn Phe Lys Ser Asp Ile Asn Pro Asn Ile Glu Lys Leu Gln Ser  
                   115                  120                  125  
 His Ile Glu Asn Leu Gln Asn Arg Gly Glu Asp Ile Ser Asn Asn Leu  
                   130                  135                  140  
 Ser Asn Asp Lys  
 145

<210> 6112

<211> 293

<212> PRT

<213> S.epidermidis

<400> 6112

Gln Arg Ile Phe Gly Gly Leu Pro Met Phe Lys Asp Phe Phe Asn Arg  
 1                  5                  10                  15  
 Ser Lys Lys Lys Lys Tyr Leu Thr Val Gln Asp Ser Lys Gln Asn Asp  
                   20                  25                  30  
 Val Pro Ala Gly Ile Met Thr Lys Cys Pro Lys Cys Lys Lys Ile Met  
                   35                  40                  45  
 Tyr Thr Lys Glu Leu Asn Glu Asn Leu Asn Val Cys Phe Asn Cys Asp  
                   50                  55                  60  
 His His Ile Ala Leu Thr Ala Tyr Lys Arg Ile Glu Ala Ile Ser Asp  
 65                  70                  75                  80  
 Glu Gly Ser Phe Ile Glu Phe Asp Arg Gly Met Thr Ser Ala Asn Pro  
                   85                  90                  95  
 Leu Asp Phe Pro Gly Tyr Glu Glu Lys Ile Glu Lys Asp Gln Gln Lys  
                   100                  105                  110  
 Thr Gly Leu Asn Glu Ala Leu Val Ser Gly Thr Ala Lys Leu Asp Gly  
                   115                  120                  125  
 Ile Gln Tyr Gly Val Ala Val Met Asp Ala Arg Phe Arg Met Gly Ser  
                   130                  135                  140  
 Met Gly Ser Val Val Gly Glu Lys Ile Cys Arg Ile Ile Asp Tyr Cys  
 145                  150                  155                  160  
 Thr Glu His Arg Leu Pro Phe Ile Leu Phe Ser Ala Ser Gly Gly Ala  
                   165                  170                  175  
 Arg Met Gln Glu Gly Ile Ile Ser Leu Met Gln Met Gly Lys Thr Ser  
                   180                  185                  190  
 Val Ser Leu Lys Arg His Ser Asp Ala Gly Leu Leu Tyr Ile Ser Tyr  
                   195                  200                  205  
 Ile Thr Asn Pro Thr Thr Gly Gly Val Ser Ala Ser Phe Ala Ser Val  
                   210                  215                  220  
 Gly Asp Ile Asn Leu Ser Glu Pro Lys Ala Leu Ile Gly Phe Ala Gly  
 225                  230                  235                  240  
 Arg Arg Val Ile Glu Gln Thr Ile Asn Glu Lys Leu Pro Asp Asp Phe

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     | 255 |     |     |  |  |
| Gln | Thr | Ala | Glu | Phe | Leu | Leu | Glu | His | Gly | Gln | Leu | Asp | Lys | Val | Ile |  |  |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |  |  |
| His | Arg | Lys | Asp | Met | Arg | Glu | Thr | Leu | Ser | Asn | Ile | Leu | Lys | Ile | His |  |  |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |  |
| Gln | Glu | Val | Ser | Asn |     |     |     |     |     |     |     |     |     |     |     |  |  |
|     | 290 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

&lt;210&gt; 6113

&lt;211&gt; 369

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6113

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Lys | Tyr | Ser | Leu | Ser | Val | Gln | Thr | Leu | Tyr | Val | Asn | Ala | Phe | Leu | Asn |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Leu | Ile | Phe | Met | Ile | His | Tyr | Leu | Lys | Ile | Ser | Tyr | Ser | Ser | Ile | Thr |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Glu | Val | Leu | His | Met | Ser | Leu | Phe | Lys | Asp | Phe | Phe | Ile | Ala | Leu | Ser |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Asn | His | Thr | Tyr | Leu | Asn | Lys | Ile | Ala | Lys | Lys | Met | Gly | Pro | Gln | Met |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Gly | Ala | Asn | Arg | Val | Val | Ala | Gly | Asn | Thr | Ile | His | Gln | Leu | Ile | Glu |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |  |  |
| Thr | Ile | Gln | Tyr | Leu | Asn | Asp | Tyr | Asn | Ile | Ser | Val | Thr | Val | Asp | Ser |  |  |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |  |  |
| Leu | Gly | Glu | Phe | Val | Asn | Thr | Arg | Glu | Glu | Ser | Ile | Lys | Ala | Lys | Glu |  |  |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Glu | Ile | Leu | Glu | Ile | Ile | Asp | Ala | Ile | Tyr | Asn | Asn | Asn | Val | Lys | Ala |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| His | Met | Ser | Val | Lys | Ile | Ser | Gln | Leu | Gly | Ser | Glu | Phe | Asp | Leu | Asn |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Leu | Ala | Tyr | Glu | Asn | Met | Arg | Glu | Ile | Leu | Leu | Lys | Ala | Asp | Lys | Asn |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |  |  |
| Gly | Lys | Met | His | Ile | Asn | Ile | Asp | Thr | Glu | Lys | Tyr | Asp | Ser | Leu | Ser |  |  |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |  |  |
| Lys | Ile | Gln | His | Ile | Ile | Asp | Arg | Leu | Lys | Gly | Glu | Phe | Lys | Asn | Val |  |  |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Gly | Thr | Val | Val | Gln | Ala | Tyr | Leu | Tyr | Glu | Ala | Asp | Asp | Ile | Ile | Asp |  |  |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |  |  |
| Lys | Tyr | Pro | Glu | Leu | Arg | Leu | Arg | Leu | Val | Lys | Gly | Ala | Tyr | Lys | Glu |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Asp | Ala | Ser | Ile | Ala | Phe | Gln | Ser | Lys | Lys | Glu | Ile | Asp | Ala | Asn | Tyr |  |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |  |  |
| Ile | Arg | Ile | Ile | Lys | Lys | Arg | Leu | Leu | Asn | Ser | Lys | Asn | Phe | Thr | Ser |  |  |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |  |  |
| Val | Ala | Thr | His | Asp | Asn | Glu | Ile | Ile | Asn | Gln | Val | Lys | Gln | Phe | Met |  |  |
|     |     | 260 |     |     |     |     | 265 |     |     |     |     |     | 270 |     |     |  |  |
| Lys | Glu | Asn | His | Ile | Ser | Lys | Asp | Lys | Met | Glu | Phe | Gln | Met | Leu | Tyr |  |  |
|     | 275 |     |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |  |
| Gly | Phe | Arg | Thr | Glu | Leu | Ala | Gln | Lys | Ile | Ala | Asn | Glu | Gly | Tyr | Phe |  |  |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |  |  |
| Phe | Thr | Val | Tyr | Val | Pro | Tyr | Gly | Asn | Asp | Trp | Phe | Ala | Tyr | Phe | Met |  |  |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     | 320 |     |  |  |
| Arg | Arg | Leu | Ala | Glu | Arg | Pro | Gln | Asn | Leu | Ser | Leu | Ala | Ile | Lys | Glu |  |  |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |  |  |

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Thr Glu Asn Glu Lys Leu Lys Thr Asn Lys Ser Phe Ile Lys Ile Ile  
                             245                            250                            255  
 Asn Ile Ser Asn Cys Asp Thr Thr Thr Ile Leu Gln Asp Leu Tyr Gln  
                             260                            265                            270  
 Arg Gly Ile Gly Lys Leu Leu Val Glu Ala Gly Pro Asn Ile Thr Ser  
                             275                            280                            285  
 Gln Phe Leu Gln Ser Lys His Leu Asn Glu Leu Ile Leu Tyr Ile Ala  
                             290                            295                            300  
 Pro Lys Leu Ile Gly Gly Ser Gly Lys His Gln Phe Tyr Lys Thr Asp  
 305                            310                            315                            320  
 Glu Val Ile Asp Leu Pro Glu Ala Thr Gln Phe Glu Ile Val Asp Ser  
                             325                            330                            335  
 Lys Leu Ile Asn Gln Asn Leu Lys Leu Lys Leu Arg Lys Lys  
                             340                            345                            350

<210> 6116

<211> 149

<212> PRT

<213> S.epidermidis

<400> 6116

Asn Ser Gln Phe Phe Ile Trp Glu Met Leu Ile Leu Ala Asn Ser Glu  
 1                            5                            10                            15  
 Lys Asn Arg Val Tyr Gly Ile Leu Gln Leu Glu Thr Leu Phe Lys Glu  
                             20                            25                            30  
 Ile Asp Ser Ile Phe Asn Thr Ile Lys Glu Glu Tyr Gly Met Ser Lys  
                             35                            40                            45  
 Glu Glu Ile Leu Ile Leu Leu Thr Leu Leu Glu Lys Gly Ser Met Thr  
                             50                            55                            60  
 Leu Lys Glu Met Asp Lys Tyr Val His Ile Lys Pro Tyr Lys Arg Thr  
 65                            70                            75                            80  
 Arg Thr Tyr Asn Asn Leu Val Asn Leu Glu Trp Ile Tyr Lys Glu Arg  
                             85                            90                            95  
 Pro Gln Asp Asp Glu Arg Thr Val Ile Ile His Phe Asn Asp Lys Gln  
                             100                            105                            110  
 Asn Ser Lys Lys Glu Asp Leu Leu Lys Phe Ile Asp Asp Ser Ile Lys  
                             115                            120                            125  
 Ile Lys Ser Glu Pro Met Gln Ser Ser Leu Gln Ser Ile Leu Ala Val  
                             130                            135                            140  
 Glu Phe Asn Val Leu  
 145

<210> 6117

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6117

Lys Arg Gln Phe Leu Tyr Tyr Phe Asn Arg Asn Cys Leu Tyr Leu Leu  
 1                            5                            10                            15  
 Ile Leu Asp Leu Leu Val Pro Val Ser Ile Leu Tyr Val Leu Lys Leu  
                             20                            25                            30  
 Leu Asn Thr Asp Arg Lys Asp Ala Ile  
                             35                            40

<210> 6118

<211> 56  
 <212> PRT  
 <213> S.epidermidis

<400> 6118  
 Lys Pro Leu Ser Ser Asp Tyr Ser Met Thr Arg Lys Gly Gly Cys Asn  
 1 5 10 15  
 Tyr Ile Ile Asp Ser Asp Leu Ile Met His Ile Leu Phe Ile Asn Ile  
 20 25 30  
 Lys Asn Val Ala Ser Ile Leu Cys Lys Gly Phe Lys Lys Ser Val Leu  
 35 40 45  
 Tyr Ile Arg Ile Val Tyr Leu Val  
 50 55

<210> 6119  
 <211> 63  
 <212> PRT  
 <213> S.epidermidis

<400> 6119  
 Met Asn Ser Ser Thr Ser Leu Phe Ser Met Asp Ala Tyr Ser Thr Met  
 1 5 10 15  
 Trp Met Ile Tyr Lys Ile Ser Trp Leu Lys Ser Ser His Ser Ile Lys  
 20 25 30  
 Leu Leu Lys Lys Tyr Phe Ile Phe His Met Ser Ala Tyr Tyr Ser Leu  
 35 40 45  
 Gln Asn Asn Tyr Tyr Lys Leu Ile Val Leu Lys Ala Phe Leu Ile  
 50 55 60

<210> 6120  
 <211> 51  
 <212> PRT  
 <213> S.epidermidis

<400> 6120  
 Val Leu Thr Ser Phe Ser Asn Asn Ser Ala Leu Tyr Ser Phe Phe Phe  
 1 5 10 15  
 Val Lys Lys Met Arg Glu Lys Ile Asn Ile Lys Lys Ala Val Glu Lys  
 20 25 30  
 Asn Asn Ile Val Ile Phe Leu Lys Leu Thr Asp Phe Ile Thr Asn Ser  
 35 40 45  
 Pro Leu Thr  
 50

<210> 6121  
 <211> 83  
 <212> PRT  
 <213> S.epidermidis

<400> 6121  
 Leu Ile Ser Ser Leu Gly Lys Lys Met Gly Ser Asn Val Lys Asp Ser  
 1 5 10 15  
 Lys Ile Thr Pro Asn Lys Ile Ser Leu Phe Thr Gly Ser Leu Val Thr  
 20 25 30  
 Asn Glu Ile Thr Thr Ile Val Gln Tyr Lys Asn Met Glu Ser Ile Phe  
 35 40 45

6118 6119 6120 6121

Phe Arg Phe Thr Arg Arg Leu Gly Ile Gly Cys Phe Leu Val Ala Ala  
 50 55 60  
 Gly Ala Tyr Lys Ile Val Ile Ile Asn Pro Thr Asn Ala Ile Asp Lys  
 65 70 75 80  
 Arg Thr Lys

<210> 6122  
 <211> 71  
 <212> PRT  
 <213> S.epidermidis

<400> 6122  
 Met Ser Leu Ser Asn Glu Glu Met Ile Ser Asn Ile Arg Gln Lys Leu  
 1 5 10 15  
 Asn Ile Val Asn Gln Ala Leu Leu Asn Pro Glu Lys Phe Lys Ser Thr  
 20 25 30  
 Pro His Gln Asp Ile Ser Glu Ile Tyr Glu Phe Val Met Ser Lys Asp  
 35 40 45  
 Ser Phe Ser Pro Ser Glu Val Thr Ala Ile Ala Asp His Leu Gly Gln  
 50 55 60  
 Leu Arg Gln Asp Met Glu Asp  
 65 70

<210> 6123  
 <211> 498  
 <212> PRT  
 <213> S.epidermidis

<400> 6123  
 Ile Phe Lys Ser Ile Gly Asp Val Lys Val Tyr Gln Tyr Asn Asp Asp  
 1 5 10 15  
 Ser Leu Met Leu His Asn Asp Leu Tyr Gln Ile Asn Met Ala Glu Ser  
 20 25 30  
 Tyr Trp Asn Asp Gly Ile His Glu Arg Ile Ala Val Phe Asp Leu Tyr  
 35 40 45  
 Phe Arg Lys Met Pro Phe Asn Ser Gly Tyr Ala Val Phe Asn Gly Leu  
 50 55 60  
 Lys Arg Val Val Asn Phe Ile Glu Asn Phe Gly Phe Thr Asn Glu Asp  
 65 70 75 80  
 Ile Thr Tyr Leu Lys Ser Ile Gly Tyr Glu Glu Asp Phe Leu Asn Tyr  
 85 90 95  
 Leu Lys Asp Leu Lys Phe Thr Gly Asn Ile Lys Ser Met Gln Glu Gly  
 100 105 110  
 Glu Ile Cys Phe Gly Asn Glu Pro Leu Leu Arg Val Glu Ala Pro Leu  
 115 120 125  
 Ile Gln Ala Gln Leu Ile Glu Thr Ile Leu Leu Asn Ile Ile Asn Phe  
 130 135 140  
 Gln Thr Leu Ile Ala Thr Lys Ala Ser Arg Ile Arg Gln Ile Ala Thr  
 145 150 155 160  
 His Asp Thr Leu Met Glu Phe Gly Thr Arg Arg Ala Gln Glu Ile Asp  
 165 170 175  
 Ala Ala Leu Trp Gly Ala Arg Ala Ala Phe Ile Gly Gly Phe Asp Ser  
 180 185 190  
 Thr Ser Asn Val Arg Ala Gly Lys Leu Phe Asn Ile Pro Val Phe Gly  
 195 200 205

Thr His Ala His Ala Leu Val Gln Thr Tyr Gly Asp Glu Tyr Ile Ala  
 210 215 220  
 Phe Lys Lys Tyr Ala Glu Arg His Lys Asn Cys Val Phe Leu Val Asp  
 225 230 235 240  
 Thr Phe His Thr Leu Lys Ser Gly Val Pro Thr Ala Ile Lys Val Ala  
 245 250 255  
 Lys Glu Leu Gly Asp Thr Ile Asn Phe Ile Gly Ile Arg Leu Asp Ser  
 260 265 270  
 Gly Asp Ile Ala Tyr Leu Ser Lys Glu Ala Arg Arg Met Leu Asp Glu  
 275 280 285  
 Ala Gly Phe Thr Glu Ala Lys Ile Ile Ala Ser Asn Asp Leu Asp Glu  
 290 295 300  
 Gln Thr Ile Thr Ser Leu Lys Ala Gln Gly Ala Lys Val Asp Gly Trp  
 305 310 315 320  
 Gly Val Gly Thr Lys Leu Ile Thr Gly Tyr Asp Gln Pro Ala Leu Gly  
 325 330 335  
 Ala Val Tyr Lys Leu Val Ser Ile Glu Thr Asp Asp Gly Thr Met Ser  
 340 345 350  
 Asp Arg Ile Lys Leu Ser Asn Asn Ala Glu Lys Val Thr Thr Pro Gly  
 355 360 365  
 Lys Lys Asn Val Tyr Arg Ile Ile Asn Asn Lys Thr Gly Lys Ala Glu  
 370 375 380  
 Gly Asp Tyr Ile Thr Leu Glu Gly Glu Asn Pro Asn Asp Glu Ser Pro  
 385 390 395 400  
 Leu Lys Met Phe His Pro Val His Thr Tyr Lys Met Lys Phe Ile Lys  
 405 410 415  
 Ser Phe Lys Ala Val Asn Leu His Gln Ser Ile Phe Glu Asn Gly Lys  
 420 425 430  
 Leu Val Tyr His Leu Pro Asp Glu Tyr Glu Ala Gln Asp Tyr Leu Lys  
 435 440 445  
 Asn Asn Leu Ser Ile Leu Trp Glu Glu Asn Lys Arg Tyr Leu Asn Pro  
 450 455 460  
 Gln Asp Tyr Pro Val Asp Leu Ser Thr Lys Cys Trp Glu Asn Lys His  
 465 470 475 480  
 Lys Arg Ile Phe Glu Val Ala Glu His Val Lys Glu Met Glu Asp Glu  
 485 490 495  
 Asn Glu

<210> 6124

<211> 252

<212> PRT

<213> S.epidermidis

<400> 6124

Arg Ser Ile Pro Leu Tyr Ile Ser Tyr Glu Cys Cys Ser Ile Glu Arg  
 1 5 10 15  
 Trp Arg Asn Met Thr Arg Lys Tyr Ile Ser Thr Glu Met Leu Ile Ile  
 20 25 30  
 Phe Thr Ala Leu Met Ile Ile Ala Asn Phe Tyr Tyr Ile Phe Phe Glu  
 35 40 45  
 Lys Ile Gly Phe Leu Leu Val Leu Leu Leu Gly Cys Val Leu Val Tyr  
 50 55 60  
 Val Gly Tyr Val Tyr Phe His Lys Val Arg Gly Leu Leu Ser Phe Trp  
 65 70 75 80  
 Ile Gly Thr Leu Leu Ile Ala Phe Thr Leu Leu Ser Asn Lys Tyr Thr





Val Cys Glu His Leu Gly Ile Asp Thr Ala Ala Val Ser Thr Gln Thr  
 225 230 235 240  
 Leu Gln Arg Asp Arg His Ala Tyr Tyr Ile Ala Thr Leu Ala Leu Ile  
 245 250 255  
 Ala Thr Ser Met Glu Lys Phe Ala Val Glu Ile Arg Asn Leu Gln Lys  
 260 265 270  
 Thr Glu Thr Arg Glu Val Glu Glu Ala Phe Ala Lys Gly Gln Lys Gly  
 275 280 285  
 Ser Ser Ala Met Pro His Lys Arg Asn Pro Ile Gly Ser Glu Asn Ile  
 290 295 300  
 Thr Gly Ile Ser Arg Val Ile Arg Gly Tyr Ile Thr Thr Ala Tyr Glu  
 305 310 315 320  
 Asn Ile Pro Leu Trp His Glu Arg Asp Ile Ser His Ser Ser Ala Glu  
 325 330 335  
 Arg Ile Met Leu Pro Asp Val Thr Ile Ala Leu Asp Tyr Ala Leu Asn  
 340 345 350  
 Arg Phe Thr Asn Ile Val Asp Arg Leu Thr Val Tyr Glu Asp Asn Met  
 355 360 365  
 Arg Asn Asn Ile Asp Lys Thr Tyr Gly Leu Ile Phe Ser Gln Arg Val  
 370 375 380  
 Leu Leu Ala Leu Ile Asn Lys Gly Met Val Arg Glu Glu Ala Tyr Asp  
 385 390 395 400  
 Lys Val Gln Pro Lys Ala Met Glu Ser Trp Glu Thr Lys Thr Pro Phe  
 405 410 415  
 Arg Glu Leu Ile Glu Gln Asp Ser Ser Ile Thr Asp Val Leu Ser Ser  
 420 425 430  
 Glu Glu Leu Asp Asp Cys Phe Asp Pro Lys His His Leu Asn Gln Val  
 435 440 445  
 Asp Thr Ile Phe Ala Arg Ala Gly Leu Ser  
 450 455

<210> 6126

<211> 44

<212> PRT

<213> S.epidermidis

<400> 6126

Glu Leu Cys Pro Gly Leu Leu Phe Tyr Glu Ile Val Lys Asn Ile Val  
 1 5 10 15  
 Phe Thr Arg Ile Phe Thr Ile His Val Lys Leu Val Phe Leu Ile Lys  
 20 25 30  
 Ser Ala Asp Asn Phe Asn Leu Lys Ile Gln Ser Leu  
 35 40

<210> 6127

<211> 168

<212> PRT

<213> S.epidermidis

<400> 6127

Leu Lys Met Leu Ser Lys Glu Leu Leu Ala Ala Leu Asn Glu Gln Met  
 1 5 10 15  
 Asn Gln Glu Tyr Phe Ala Ala His Ala Tyr Met Ala Met Ala Ala Tyr  
 20 25 30  
 Cys Asp Lys Glu Ser Tyr Asp Gly Phe Ala Asn Phe Tyr Ile Glu Gln  
 35 40 45

Ala Lys Glu Glu Arg Phe His Gly Lys Lys Ile Tyr Asp Tyr Ile Asn  
 50 55 60  
 Asp Arg Gly Glu His Ala Ile Phe Asp Thr Ile Lys Ala Pro Lys Val  
 65 70 75 80  
 Glu Phe Ser Ser Ile Leu Glu Thr Phe Lys Asp Ser Leu Ala Gln Glu  
 85 90 95  
 Arg Asp Val Thr Gln Arg Phe Tyr Asn Leu Ser Glu Leu Ala Arg Asn  
 100 105 110  
 Asp Lys Asp Tyr Ala Thr Ile Ser Phe Leu Asn Trp Phe Leu Asp Glu  
 115 120 125  
 Gln Val Glu Glu Glu Ser Thr Phe Glu Thr His Ile Asp Tyr Leu Thr  
 130 135 140  
 Arg Ile Gly Asp Asp Cys Asn Thr Leu Tyr Leu Tyr Glu Lys Glu Leu  
 145 150 155 160  
 Ala Ala Arg Ser Phe Asn Glu Gln  
 165

<210> 6128  
 <211> 99  
 <212> PRT  
 <213> S.epidermidis

<400> 6128  
 Gly Ser Ile Pro Pro Thr Pro Pro Arg Lys Leu Ala Leu Thr Phe Gln  
 1 5 10 15  
 Arg Leu Leu Pro Ile Leu Tyr Lys Leu Cys Arg Ile Ser Ile Ser Gly  
 20 25 30  
 Tyr Ser Lys Ala Pro Arg Gly Leu Ser Val Leu Ser Arg Val Thr Cys  
 35 40 45  
 Ile Phe Thr Gly Thr Met Ile Ser Pro Ser Leu Ser Leu Arg Gln Cys  
 50 55 60  
 Pro Asn Arg Tyr Ala Phe Arg Ala Gly Arg Asn Leu Pro Asp Lys Glu  
 65 70 75 80  
 Phe Arg Tyr Leu Arg Thr Val Ile Val Thr Ala Ala Val Tyr Trp Gly  
 85 90 95  
 Phe Asp Ser

<210> 6129  
 <211> 59  
 <212> PRT  
 <213> S.epidermidis

<400> 6129  
 His Tyr Tyr Pro Ser Phe Ser Leu Arg Arg Ile Leu Ile Met Glu Asn  
 1 5 10 15  
 Ile Phe Asn Leu Phe Ile Lys Phe Phe Thr Thr Ile Leu Glu Phe Ile  
 20 25 30  
 Gly Thr Val Ala Gly Asp Ser Val Cys Ala Ser Tyr Phe Asp Glu Pro  
 35 40 45  
 Glu Val Pro Glu Glu Leu Thr Lys Leu Tyr Glu  
 50 55

<210> 6130  
 <211> 116  
 <212> PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6130

Ala Ile Ile Pro His Met Thr Pro Leu Ile Val Asn Gly Met Ala Ile  
 1 5 10 15  
 Ile Lys Cys Phe Lys Tyr Thr Gly Ile Ile Ile Leu Ala Ala Pro Met  
 20 25 30  
 Ser Asn Thr Thr Leu Thr Pro Arg Glu Leu Thr Leu Lys Asp Pro Asn  
 35 40 45  
 Lys Lys Val Thr Gln Ala Ala Thr Ile Pro Ile Phe Ala Ala Pro Leu  
 50 55 60  
 Pro Lys Pro Val Arg Leu Ile Ala Val Ala Ile Ala Thr Asn Glu Ile  
 65 70 75 80  
 Gly Val Thr Ile Asn Lys Glu Asn Val Thr Gln Ile Asn Ile Asp Ile  
 85 90 95  
 Asn Asn Gly Phe Asn Ser Val Asn Leu Phe Thr Asn Phe Pro Ser Asp  
 100 105 110  
 Cys Val Ile Thr  
 115

&lt;210&gt; 6131

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6131

Arg Leu Pro Pro Thr Tyr Tyr Arg Gly Cys Trp His Val Val Ser Arg  
 1 5 10 15  
 Gly Phe Leu Ile Arg Tyr Arg Gln Asp Val His Ser Tyr Leu His Ile  
 20 25 30  
 Cys Ser Ser Leu Ile Thr Glu Phe Tyr Asp Pro Lys Thr Phe Ile Thr  
 35 40 45  
 His Ala Ala Leu Leu Arg Gln Ala Phe Ala His Cys Gly Arg Phe Pro  
 50 55 60  
 Thr Ala Ala Ser Arg Arg Ser Leu Asp Arg Val Ser Val Pro Val Trp  
 65 70 75 80  
 Pro Ile Thr Leu Ser Gly Arg Leu Arg Ile Val Ala Leu Val Ser Arg  
 85 90 95  
 Tyr Leu Thr Asn  
 100

&lt;210&gt; 6132

&lt;211&gt; 70

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6132

Thr Leu Thr Phe Pro Lys Cys Ile Ser Lys Gly Ala Thr Tyr Lys Tyr  
 1 5 10 15  
 Arg Arg His Cys Phe Phe Ile Ser Thr His Pro Thr Phe His Ile Phe  
 20 25 30  
 Phe Ser Val Leu Glu Gly Asn Ala His His Phe Val His Asp Leu Leu  
 35 40 45  
 Leu Ile Asn His Arg His Lys Leu Phe Thr Ile Gln Ser Leu Thr Ala  
 50 55 60  
 Asn Thr Leu Lys Cys Pro



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<210> 6135
<211> 384
<212> PRT
<213> S.epidermidis
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|       |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> | 6135 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Ile   | Val  | Tyr | Thr | Tyr | Thr | Ile | Lys | Ile | Arg | Asn | Glu | Ile | Ile | Met | Lys |
| 1     |      |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile   | Val  | Glu | Val | Lys | Ser | Lys | Asn | Gly | Thr | Asn | Phe | Met | Ile | Leu | Asp |
|       |      |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly   | Asn  | Asn | Glu | Pro | Ile | Val | Asp | Ala | Val | Arg | Tyr | Leu | Lys | Tyr | Leu |
|       |      | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asp   | Ser  | Val | Lys | Lys | Ser | Leu | Asn | Thr | Lys | Lys | Thr | Tyr | Ala | Tyr | Ala |
|       | 50   |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu   | Lys  | Asn | Phe | Phe | Val | Tyr | Leu | Glu | Ser | Lys | Lys | Ile | Cys | Tyr | Lys |
| 65    |      |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Glu   | Val  | Ser | Phe | Asp | Asn | Phe | Val | Asp | Phe | Ile | Arg | Trp | Met | Lys | Thr |
|       |      |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Pro   | Phe  | Glu | Tyr | Glu | Asn | Val | Leu | Ser | Tyr | His | Arg | Lys | Glu | Lys | Ser |
|       |      |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile   | Ser  | Pro | Lys | Thr | Ile | Asn | Leu | Thr | Met | Thr | Val | Val | Ser | Asn | Phe |
|       |      | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Tyr   | Asp  | Tyr | Leu | Tyr | Arg | Ser | Lys | Lys | Leu | Asp | Val | Asn | Phe | Tyr | Asp |
|       | 130  |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |



145                      150                      155                      160  
 Ser Pro Ile Val Glu Asn Asn Gln Gln Asp Asn Asn Thr Asn Lys Val  
                                  165                      170                      175  
 Val Glu Thr Thr Asn Gln Asn Lys Asp Glu Val Asn Gly Lys Glu Gln  
                                  180                      185                      190  
 Asn Gln Ala Asn Thr Ser Val Thr Asn Thr Gln Ile Thr Lys Asn Glu  
                                  195                      200                      205  
 Lys Asp Glu Asp Thr Lys Thr Leu Lys Lys Asp Lys Asp Glu Lys Glu  
                                  210                      215                      220  
 Ser Lys Asp Thr Lys Thr Pro Lys Lys Asp Lys Glu Lys Lys Asp Ile  
 225                      230                      235                      240  
 Lys Thr Pro Lys Lys Asp Arg Glu Glu Lys Lys Pro Val Ile Pro Ser  
                                  245                      250                      255  
 Asn Gly Lys Val Glu Lys Asp Glu Asp Thr Lys Thr Pro Lys Lys Asp  
                                  260                      265                      270  
 Lys Glu Lys Lys Ile Thr Lys Thr Leu Lys Lys Asp Arg Glu Glu Lys  
                                  275                      280                      285  
 Ser Pro Val Ile Pro Lys Ser Gly Lys Asp Glu Lys Asp Thr Lys Ile  
                                  290                      295                      300  
 Thr Lys Lys Asp Lys Glu Asp Glu Ile Thr Thr Thr Ser Lys Lys Asp  
 305                      310                      315                      320  
 Asn Asn Asn Asp Val Gln Asp Lys Leu Pro Glu Thr Gly Lys Thr Lys  
                                  325                      330                      335  
 Asp Ile Gln Asn Pro Ala Leu Ile Met Leu Leu Thr Gly Leu Gly Leu  
                                  340                      345                      350  
 Leu Gly Leu Phe Arg Asn Lys Ile Arg Glu /  
                                  355                      360

<210> 6137

<211> 236

<212> PRT

<213> S.epidermidis

<400> 6137

Ile Lys Glu Phe His Lys Met Tyr Asp Ile Thr Lys Trp Lys His Met  
 1                      5                      10                      15  
 Phe Lys Leu Asp Pro Ala Lys Ser Ile Ser Asp Glu Asn Leu Glu Ala  
                                  20                      25                      30  
 Leu Cys Met Ser Asn Thr Asp Ala Ile Ile Ile Gly Gly Thr Asp Asp  
                                  35                      40                      45  
 Val Thr Glu Asp Asn Val Ile His Leu Met Ser Arg Val Arg Arg Tyr  
                                  50                      55                      60  
 Pro Leu Pro Leu Val Leu Glu Val Ser Asn Val Glu Ser Val Met Pro  
 65                      70                      75                      80  
 Gly Phe Asp Phe Tyr Phe Ile Pro Thr Val Met Asn Ser Lys Asp Thr  
                                  85                      90                      95  
 Lys Tyr His Asn Glu Ile Leu Leu Glu Ala Leu Lys Lys Tyr Gly His  
                                  100                      105                      110  
 Val Ile Asn Phe Asp Glu Val Phe Phe Glu Gly Tyr Val Val Leu Asn  
                                  115                      120                      125  
 Ala Asn Ser Lys Val Ala Lys Ile Thr Lys Ala Tyr Thr Gln Leu Gly  
                                  130                      135                      140  
 Ile Glu Asp Val Glu Ala Tyr Ala Gln Met Ala Glu Glu Leu Tyr Arg  
 145                      150                      155                      160  
 Phe Pro Ile Met Tyr Val Glu Tyr Ser Gly Thr Tyr Gly Asp Val Asp  
                                  165                      170                      175



Lys Val Lys Ala Ile Ala Asn Met Leu Gln His Thr Gln Leu Phe Tyr  
                   180                  185                  190  
 Gly Gly Gly Ile Thr Asn Ile Asp Lys Ala Asn Glu Met Ser Asn Ile  
                   195                  200                  205  
 Ala Asp Thr Ile Val Val Gly Asp Ile Ile Tyr Asn Asp Ile Lys Lys  
                   210                  215                  220  
 Ala Leu Lys Thr Val Lys Ile Lys Glu Ser Asn Lys  
 225                  230                  235

<210> 6138

<211> 50

<212> PRT

<213> S.epidermidis

<400> 6138

Ile Thr Trp Phe Arg Val Tyr Asp Gln Ile Leu Asn Ala Leu Phe Arg  
 1                  5                  10                  15  
 Leu Ala Phe Ala Ala Ala Pro His Leu Leu Leu Asn Leu Ala Ser Asp  
                   20                  25                  30  
 Arg Asn Ser Pro Val His Ser Thr Lys Gly Thr Pro Ser Pro Ile Asn  
                   35                  40                  45  
 Gly Leu  
 50

<210> 6139

<211> 192

<212> PRT

<213> S.epidermidis

<400> 6139

Ser Lys Trp Leu Asn Thr Ile Lys Val Val Trp Ser Met Val Lys Glu  
 1                  5                  10                  15  
 Ser Ile Pro Lys Glu Gly Glu Asn Ile Lys Ile Gln Ser Tyr Lys His  
                   20                  25                  30  
 Asp Gly Asn Ile His Arg Val Trp Ser Glu Thr Thr Ile Leu Lys Gly  
                   35                  40                  45  
 Thr Glu His Val Ile Ile Gly Gly Asn Asp His Thr Leu Val Thr Glu  
                   50                  55                  60  
 Ser Asp Gly Arg Thr Trp Ile Thr Arg Glu Pro Ala Ile Val Tyr Phe  
 65                  70                  75                  80  
 His Ser Glu Tyr Trp Phe Asn Val Ile Cys Met Phe Arg Glu Asp Gly  
                   85                  90                  95  
 Ile Tyr Tyr Tyr Cys Asn Leu Ser Ser Pro Phe Ala Cys Asp Glu Glu  
                   100                  105                  110  
 Ala Leu Lys Tyr Ile Asp Tyr Asp Leu Asp Ile Lys Val Tyr Pro Asn  
                   115                  120                  125  
 Gly Lys Tyr His Leu Leu Asp Glu Asp Glu Tyr Glu Gln His Met Asn  
                   130                  135                  140  
 Gln Met Asn Tyr Pro His Asp Ile Asp Ile Ile Leu Arg Arg Asn Val  
 145                  150                  155                  160  
 Asp Ile Leu Gln Gln Trp Ile Glu Gln Lys Lys Gly Pro Phe Ala Pro  
                   165                  170                  175  
 Asp Phe Ile Lys Val Trp Lys Glu Arg Tyr Lys Lys Ile Arg Asp Tyr  
                   180                  185                  190

<210> 6140



Asn Asn Lys Thr Asn Gly Ala Lys Ile Lys Gln Ile Glu Ile Arg Lys  
 1 5 10 15  
 Gln Asn Arg Ile Ser Asn Ala Met Ile Thr Thr Gly Ile Lys Ile Ile  
 20 25 30  
 Asn Asn Asp Lys Ile Pro Arg Leu Asn Asp Ala Ser Ile Ala Leu Thr  
 35 40 45  
 Met Phe Ala Lys Val Gly Leu  
 50 55

<210> 6144

<211> 402

<212> PRT

<213> S.epidermidis

<400> 6144

Met Lys Arg Thr Ile Phe Leu Leu Met Ser Ile Leu Leu Leu Leu Thr  
 1 5 10 15  
 Ala Cys Gly Asp Gly His Lys Gln Thr Ser Ser Asp Lys Glu Gln Ser  
 20 25 30  
 Glu His Lys Asp Asn His Asn Lys Asn Gln Val Lys Gln Ile Ala Thr  
 35 40 45  
 Asp Lys Lys Val Gln Gly Asp Asn Tyr Arg Thr Ile Leu Pro Phe Lys  
 50 55 60  
 Glu Ser Gln Ala Arg Gly Leu Leu Gln Asp Asn Met Ala Asn Gly Tyr  
 65 70 75 80  
 Asn Gly Glu Asp Phe Glu Ser Gly Leu Leu Glu Leu Ser Lys Glu Ile  
 85 90 95  
 Phe Pro Thr Asn Lys Tyr Leu Tyr Gln Asp Gly Gln Tyr Leu Asp Lys  
 100 105 110  
 Lys Thr Ile Asn Ala Tyr Leu Asp Pro Lys Tyr Thr Lys Lys Glu Ile  
 115 120 125  
 Asp Lys Met Ser Glu Lys Glu Lys Lys Ser Lys Asn Ala Asn Glu Asn  
 130 135 140  
 Leu Gly Leu Asn Pro Ser His Asn Gly Glu Thr Asp Glu Glu Lys Ile  
 145 150 155 160  
 Ala Glu Asn Ser Pro Ala Tyr Leu Ser Asn Ile Leu Glu Gln Asp Phe  
 165 170 175  
 Tyr Gly Asn Ser Asp Ser Lys Gly Lys Asn Ile Lys Gly Met Thr Ile  
 180 185 190  
 Gly Leu Ala Met Asn Ser Val Tyr Tyr Tyr Lys Lys Glu Lys Asp Gly  
 195 200 205  
 Glu Thr Phe Ser Lys Asp Leu Ser Asp Lys Glu Ile Glu Lys Gln Gly  
 210 215 220  
 Lys Gln Met Ala Ser Glu Met Leu Ser Arg Leu Arg Glu Asn Ser Asp  
 225 230 235 240  
 Leu Lys Asp Ile Pro Ile His Phe Ala Ile Tyr Lys Gln Ser Ser Gln  
 245 250 255  
 Asp Ser Ile Thr Pro Gly Glu Phe Ile Val Gly Thr Thr Val Glu Glu  
 260 265 270  
 Gly Lys Thr Lys Ile Asn Ser Trp Asp Asn Ile Asn Glu Lys Ala Ala  
 275 280 285  
 Leu Ile Pro Ser Ser Thr Ala Ala Asp Tyr Asp Glu Thr Leu Asn Asn  
 290 295 300  
 Asn Phe Lys Gln Phe Asn Asp Asn Leu Gln Ser Tyr Phe Ser Asn Phe  
 305 310 315 320  
 Thr Gln Ala Val Gly Lys Val Lys Phe Val Asn Lys Lys Ala Lys Gln

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          325          330          335
Leu Thr Val Asp Leu Pro Ile Asp Tyr Tyr Gly Gln Ala Glu Thr Ile
          340          345          350
Gly Ile Thr Gln Tyr Val Thr Glu Gln Ala Glu Lys Tyr Phe Asp Lys
          355          360          365
Leu Asp Glu Tyr Glu Ile Arg Ile Lys Asp Gly Asn Thr Pro Arg Ala
          370          375          380
Leu Ile Ser Lys Thr Lys Asp Asp Lys Glu Pro Gln Val His Ile Tyr
385          390          395          400
His Asn

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<210> 6145
<211> 48
<212> PRT
<213> S.epidermidis

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<400> 6145
Gln Asn Leu Thr Lys Ser Asp Ile Ile Ile Ile Ile Phe Ile Val His
1          5          10          15
Phe Ala His Asn Gln Asn Lys Val Asp Gly Asn Phe Leu Ile Leu Gly
          20          25          30
Val Ile Asn Tyr Asp Asn Ile Lys Gln Ile Pro Tyr Phe Tyr Gln Gln
          35          40          45

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<210> 6146
<211> 97
<212> PRT
<213> S.epidermidis

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<400> 6146
Gly Ser Leu Thr Ala Arg Pro Thr Ser Arg Ala Gly Ser Lys Asp Gly
1          5          10          15
Leu Ser Asp Pro Val Val Pro His Gly Arg Ala Ile Ala Gln Arg Ile
          20          25          30
Lys Ala Thr Pro Gly Ile Thr Gly Leu Ser Pro Pro Arg Val His Ile
          35          40          45
Asp Gly Glu Val Trp His Leu Asp Val Gly Ser Ser His Pro Gly Ala
          50          55          60
Val Val Gly Pro Lys Gly Trp Ala Val Arg Pro Leu Lys Arg Tyr Ala
65          70          75          80
Ser Trp Val Gln Asn Val Val Arg Gln Phe Gly Pro Tyr Pro Ser Trp
          85          90          95
Ala

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<210> 6147
<211> 691
<212> PRT
<213> S.epidermidis

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<400> 6147
Arg Gly Met Thr Met Ser Ile Pro Ile Asn Leu Pro Thr Asn Ser Thr
1          5          10          15
Met Ile Asn Glu Leu Cys Thr Leu Gln Ser Arg Thr Ile Asn Ile Lys
          20          25          30

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Glu | Val | Leu | Ile | Thr | Glu | Ile | Tyr | Asp | Asp | Tyr | Phe | Phe | Lys | Asn |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asp | Glu | Trp | His | Ile | Thr | Ala | Phe | Asn | Lys | Phe | Lys | Gln | Phe | Gln | Asp |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Ile | Lys | Asn | Tyr | Arg | Asp | Lys | Arg | Lys | Asn | Val | Phe | Phe | Arg | Ile |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Lys | Ser | Lys | Asn | Leu | Asn | Leu | Glu | Phe | Lys | Tyr | Leu | Phe | Leu | Lys | Leu |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ile | Val | Lys | Glu | Asp | Trp | Ser | Leu | Ser | Asn | Leu | Phe | Asn | Thr | Gly | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Lys | Leu | Asn | Lys | Ile | Ala | Lys | Phe | Phe | Asn | Glu | Val | Tyr | Pro | Asn |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Asn | Ser | Leu | Leu | Asp | Cys | Asp | Ile | Asn | Thr | Leu | Glu | Lys | His | Trp |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Phe | Asn | Trp | Leu | Thr | Glu | Asn | Asn | Ile | Pro | Ile | Lys | Arg | Arg | Ser | Ser |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Thr | Ile | Val | Phe | Gly | Asp | Tyr | Glu | Tyr | Lys | Ser | Gly | Leu | Ala | Ser | Phe |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Leu | Lys | Asn | Met | Tyr | Ile | Asn | Leu | Ile | Lys | Phe | Ile | Asp | Lys | Arg | Glu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     | 190 |     |     |     |
| Glu | Trp | Glu | Lys | Asp | Lys | Trp | Asp | Ile | Arg | Asn | Leu | Glu | Lys | Tyr | Gly |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Leu | Ser | Tyr | Asn | Lys | Thr | Leu | Thr | Gly | Asn | Tyr | Leu | Asn | Phe | Glu | Lys |
|     |     | 210 |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ile | Glu | Ser | Ile | Lys | Met | Arg | Glu | Leu | Ala | Lys | Lys | Tyr | Leu | Lys | Asn |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Arg | Leu | Ile | Thr | Gly | Asp | Ile | Ala | Phe | Ala | Thr | Ala | Arg | Phe | Tyr | Ile |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Arg | Val | Leu | Thr | Arg | Phe | Phe | Gln | Asn | Ile | Ser | Lys | Asn | Lys | Glu | Thr |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Arg | Asn | Ser | Leu | Asn | Glu | Leu | Asp | Arg | Cys | His | Ile | Glu | Ala | Tyr | Ile |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Glu | Phe | Leu | Phe | Glu | Tyr | Ala | Ala | Asn | Lys | His | Leu | Gln | Ser | Thr | Lys |
|     |     | 290 |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Asn | Phe | Val | Arg | Glu | Glu | Leu | Lys | Thr | Ile | Arg | Arg | Phe | Leu | Asn | Asp |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Ile | Ile | Thr | Gln | Asn | Tyr | Ala | Ile | Ala | Pro | Tyr | Gln | Asp | Ile | Arg | Phe |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Leu | Ile | Tyr | Pro | Gln | Asp | Leu | Pro | Lys | His | Glu | Lys | Lys | Asn | Ser | Ser |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Gln | Ile | Asp | Tyr | Ile | Pro | Asp | Phe | Val | Leu | Glu | Gln | Leu | Phe | Glu | His |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Ile | Asn | Asp | Leu | His | Lys | Asp | Leu | Ile | Pro | Val | Val | Trp | Ile | Ala | Phe |
|     |     | 370 |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Lys | Thr | Gly | Leu | Arg | Ile | Ser | Asp | Val | Leu | Thr | Leu | Gln | Asn | Asn | Cys |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Leu | Ala | Lys | Val | Asn | Gly | Lys | Tyr | Ser | Ile | Ile | Thr | Asp | Ile | Ala | Lys |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Thr | Phe | Val | Lys | Gly | His | Arg | Ile | Pro | Ile | Asp | Asn | Lys | Leu | Ala | Asp |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Ile | Ile | Ala | Val | Leu | Ile | Ala | Asp | Ser | Lys | Ser | Lys | Ser | Thr | Lys | Asp |
|     |     | 435 |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Asn | Asn | Pro | Asn | Asn | Tyr | Ile | Phe | Ala | Ile | Tyr | Lys | Gly | Lys | Arg | Lys |
|     |     | 450 |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |
| Gly | Met | Pro | Phe | Thr | Gln | His | Met | Val | Arg | Ala | His | Leu | Asn | His | Leu |
| 465 |     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |

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<210> 6148
<211> 116
<212> PRT
<213> S.epidermidis
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<210> 6149
<211> 41
<212> PRT
<213> S.epidermidis
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&lt;400&gt; 6149

Ser Cys Lys Thr His Thr His Asn Asp Met Cys Gly Cys Val His Lys  
 1 5 10 15  
 Cys Ser Leu Phe Ser Ser Leu Phe Asn Ile Tyr Tyr Asn Leu Lys Val  
 20 25 30  
 Glu Ile Thr Lys Leu Thr Tyr Phe Lys  
 35 40

&lt;210&gt; 6150

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6150

Ser Pro Lys Thr Tyr Val Lys Thr Thr Ala Asn Asn Ala Pro Ile Thr  
 1 5 10 15  
 Val Ala Gly Asn Leu Leu Tyr Pro Phe Phe Asn Asp Ala Leu Ala Val  
 20 25 30  
 Gly Ser Ile Val Thr Ile Ala Val Ser Met Ala Lys Ile Gly Val Arg  
 35 40 45  
 Phe Asn Asn Ile Gln Asn Lys Asp Val Lys Lys Val Ala Lys Pro Val  
 50 55 60  
 Leu Ile Val Arg Ala Pro Ile Ile Cys Leu Tyr His Leu Ser Phe Ile  
 65 70 75 80  
 Ser Tyr

&lt;210&gt; 6151

&lt;211&gt; 491

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6151

Met Gly Arg Thr Leu Lys Met Ser Ile Arg Phe Glu Ser Ile Glu Lys  
 1 5 10 15  
 Leu Thr Glu Leu Ile Lys Asn Lys Glu Ile Lys Pro Ser Asp Val Val  
 20 25 30  
 Lys Asp Ile Tyr Ala Ala Ile Glu Glu Thr Asp Pro Thr Ile Lys Ser  
 35 40 45  
 Phe Leu Ala Leu Asp Lys Glu Asn Ala Ile Lys Lys Ala Glu Glu Leu  
 50 55 60  
 Asp Glu Leu Gln Ala Lys Asp Gln Met Asp Gly Lys Leu Phe Gly Ile  
 65 70 75 80  
 Pro Met Gly Ile Lys Asp Asn Ile Ile Thr Lys Asp Val Glu Thr Thr  
 85 90 95  
 Cys Ala Ser Lys Met Leu Glu Gly Phe Val Pro Ile Tyr Glu Ser Thr  
 100 105 110  
 Val Met Asn Lys Leu His Asp Glu Asn Ala Val Leu Ile Gly Lys Leu  
 115 120 125  
 Asn Met Asp Glu Phe Ala Met Gly Gly Ser Thr Glu Thr Ser Tyr Phe  
 130 135 140  
 Lys Lys Thr Leu Asn Pro Phe Asp His Thr Ala Val Pro Gly Gly Ser  
 145 150 155 160  
 Ser Gly Gly Ser Ala Ala Ala Val Ala Ala Gly Leu Val Pro Phe Ser  
 165 170 175

Leu Gly Ser Asp Thr Gly Gly Ser Ile Arg Gln Pro Ala Ser Tyr Cys  
 180 185 190  
 Gly Val Val Gly Met Lys Pro Thr Tyr Gly Arg Val Ser Arg Phe Gly  
 195 200 205  
 Leu Val Ala Phe Ala Ser Ser Leu Asp Gln Ile Gly Pro Ile Thr Arg  
 210 215 220  
 Asn Val Lys Asp Asn Ala Leu Val Leu Glu Ala Ile Ser Gly Val Asp  
 225 230 235 240  
 Ala Asn Asp Ser Thr Ser Ala Pro Val Asp Asp Val Asp Phe Thr Ser  
 245 250 255  
 Asp Ile Gly Lys Asp Ile Lys Gly Leu Lys Ile Ala Leu Pro Lys Glu  
 260 265 270  
 Tyr Leu Gly Glu Gly Val Ser Glu Glu Val Lys Thr Ser Val Lys Glu  
 275 280 285  
 Ala Val Glu Thr Leu Lys Ser Leu Gly Ala Glu Val Asp Glu Val Ser  
 290 295 300  
 Leu Pro Asn Thr Lys Tyr Gly Ile Pro Ser Tyr Tyr Val Ile Ala Ser  
 305 310 315 320  
 Ser Glu Ala Ser Ala Asn Leu Ala Arg Phe Asp Gly Ile Arg Tyr Gly  
 325 330 335  
 Tyr His Ser Lys Glu Ala Gln Ser Leu Glu Glu Leu Tyr Lys Met Ser  
 340 345 350  
 Arg Ser Glu Gly Phe Gly Glu Glu Val Lys Arg Arg Ile Phe Leu Gly  
 355 360 365  
 Thr Phe Ala Leu Ser Ser Gly Tyr Tyr Asp Ala Tyr Tyr Lys Lys Ser  
 370 375 380  
 Gln Lys Val Arg Thr Leu Ile Lys Asn Asp Phe Asp Lys Val Phe Glu  
 385 390 395 400  
 Ser Tyr Asp Val Val Gly Pro Thr Ala Pro Thr Thr Ala Phe Asn  
 405 410 415  
 Ile Gly Glu Glu Ile Asp Asp Pro Leu Thr Met Tyr Ala Asn Asp Leu  
 420 425 430  
 Leu Thr Thr Pro Val Asn Leu Ala Gly Leu Pro Gly Ile Ser Val Pro  
 435 440 445  
 Cys Gly Gln Ser Asn Gly Arg Pro Ile Gly Leu Gln Leu Ile Gly Lys  
 450 455 460  
 Pro Phe Asp Glu Lys Thr Leu Tyr Arg Val Ala Tyr Gln Phe Glu Thr  
 465 470 475 480  
 Gln Tyr Asn Leu His Asp Ala Tyr Glu Asn Leu  
 485 490

&lt;210&gt; 6152

&lt;211&gt; 41

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6152

Thr Thr Pro Ala Tyr Leu Lys Leu Glu Arg Lys Ile Gly Phe Ala Pro  
 1 5 10 15  
 Ile Ser His Ser Gly Lys Glu Cys Val Leu Arg Val Glu Leu Leu Pro  
 20 25 30  
 His Asn Ile Lys Ile Trp Ser Gly Arg  
 35 40

&lt;210&gt; 6153

&lt;211&gt; 52





300

|            |            |            |            |           |     |            |            |           |           |           |            |            |           |           |     |  |
|------------|------------|------------|------------|-----------|-----|------------|------------|-----------|-----------|-----------|------------|------------|-----------|-----------|-----|--|
| <400>      | 6155       |            |            |           |     |            |            |           |           |           |            |            |           |           |     |  |
| Gly<br>1   | Gly        | Arg        | Ala        | Leu<br>5  | Ala | Ser        | Ile        | Arg       | Glu<br>10 | Asp       | Val        | Gln        | Phe       | Ser<br>15 | Asn |  |
| Pro        | Thr        | Ile        | Ser<br>20  | Glu       | Ser | Ser        | Phe        | Lys<br>25 | Ile       | Asn       | Glu        | Asn        | Phe<br>30 | Asp       | Ser |  |
| Glu        | Asn        | Phe<br>35  | Glu        | Gly       | Phe | Gly        | Asp<br>40  | Ile       | Lys       | Leu       | Asn        | Leu<br>45  | Lys       | Lys       | Tyr |  |
| Tyr        | Tyr<br>50  | Glu        | Glu        | Asn       | Asn | Glu<br>55  | Ile        | Asp       | Asn       | Asn       | Asn<br>60  | Asn        | Asn       | Asn       | Gly |  |
| Ser<br>65  | Ala        | Leu        | Leu        | Ser<br>70 | Leu | Glu        | Ile        | Ile       | Ile       | Gly<br>75 | Asp        | Ile        | Asp       | Trp<br>80 | Lys |  |
| Tyr        | Pro        | Phe        | Met<br>85  | Phe       | Lys | Val        | Glu        | Ile       | Glu<br>90 | Ser       | Phe        | Phe        | Glu<br>95 | Trp       | Glu |  |
| Asn        | Phe        | Lys        | Gly<br>100 | Thr       | Asp | Ile        | Asp<br>105 | Lys       | Phe       | Leu       | Glu        | Ile<br>110 | Asn       | Gly       | Ala |  |
| Ala        | Ile        | Leu<br>115 | Tyr        | Ser       | Tyr | Ser        | Arg<br>120 | Ala       | His       | Ile       | Ser        | His<br>125 | Ile       | Thr       | Asn |  |
| Thr        | Ser<br>130 | Lys        | Tyr        | Pro       | Ser | Phe<br>135 | Asp        | Leu       | Pro       | Phe       | Tyr<br>140 | Asn        | Phe       | Thr       | Asp |  |
| Asn<br>145 | Asp        | Tyr        | Gln        |           |     |            |            |           |           |           |            |            |           |           |     |  |

|            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 6156 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Leu        | Lys | Gly | Ala | Phe | Asn | Leu | Arg | Leu | Gly | Ala | Arg | Ile | Phe | Lys | Thr |
| 1          |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly        | Ile | Ala | Ile | Ile | Leu | Ala | Met | Ser | Ile | Ala | Ser | Leu | Leu | Pro | Asp |
|            |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asn        | Ile | Gly | Leu | Lys | Thr | Leu | Ala | Gly | Val | Ser | Ala | Val | Val | Ala | Met |
|            |     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gln        | Pro | Ser | Val | Tyr | Arg | Ser | Ile | Lys | Thr | Val | Ser | Glu | Gln | Ala | Ile |
|            | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly        | Asn | Val | Ile | Gly | Ala | Leu | Leu | Ala | Val | Thr | Met | Val | Thr | Ile | Phe |
| 65         |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Ser        | Asn | Asn | Phe | Ile | Ile | Met | Gly | Val | Thr | Val | Ile | Leu | Leu | Ile | Ala |
|            |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ile        | Leu | Phe | Gln | Phe | Asn | Leu | Ala | His | Val | Ala | Thr | Leu | Ala | Ser | Val |
|            |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Thr        | Ala | Leu | Ile | Ile | Met | Gly | Gln | His | Thr | Gly | Ser | Phe | Tyr | Val | Ala |
|            |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala        | Phe | Phe | Arg | Phe | Val | Leu | Val | Met | Ile | Gly | Val | Ser | Ser | Ser | Ser |
|            |     |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Val        | Val | Asn | Leu | Ile | Phe | Leu | Pro | Pro | Lys | Phe | Glu | Thr | Lys | Ile | Tyr |

145 150 155 160  
 Tyr Asn Ser Met Asn Ile Ser Ser Asp Ile Phe Val Trp Phe Lys Leu  
 165 170 175  
 Val Leu Asn Asp Thr Ser Glu Phe His Asn Ile Lys Gln Asp Gly Asp  
 180 185 190  
 Gln Leu Asn Ser Arg Ile Asn Lys Leu Glu Lys Ile Phe Asp Tyr Tyr  
 195 200 205  
 Asn Glu Glu Arg Pro Leu Thr Lys Lys His Ile Tyr Gln Gln Asn Arg  
 210 215 220  
 Lys Lys Ile Leu Phe Arg Glu Val Val Arg Thr Thr Arg Gln Ala Tyr  
 225 230 235 240  
 Glu Val Leu Lys Arg Met Ser Arg Tyr Gln Asn Asp Leu Tyr Gln Leu  
 245 250 255  
 Asn Asn Gln Leu Leu Leu Gln Ile Lys Leu Glu Leu Asp Ser Leu Val  
 260 265 270  
 Thr Leu His Glu Gln Ile Phe Lys Ser Leu Ser Lys Lys Ala Arg Tyr  
 275 280 285  
 Asp Val Thr Gln Leu Asp Tyr Glu Val Asp Asn Pro Gln Lys Lys Asn  
 290 295 300  
 Leu Met Asp Ala Phe Gln Gln Glu Leu Ile Lys Asn Pro His Gln Thr  
 305 310 315 320  
 Gln Tyr Ser Tyr Ser Asn Met Met Gln Ile Ile Ala Glu Ile Glu Glu  
 325 330 335  
 Tyr Arg Tyr Gln Leu Glu His Leu Asp Arg Ile Arg Leu Ser Phe Phe  
 340 345 350  
 Thr Tyr His Arg Ser Asp Thr Asp Ile Asp Ile Ser Asp Glu Asp Phe  
 355 360 365  
 Asp Leu  
 370

<210> 6157  
 <211> 105  
 <212> PRT  
 <213> S.epidermidis

<400> 6157  
 Gly Gly Phe Tyr Leu Met Thr Lys Val Thr Arg Glu Glu Val Glu His  
 1 5 10 15  
 Ile Ala Asn Leu Ala Arg Leu Gln Ile Ser Pro Glu Glu Thr Glu Glu  
 20 25 30  
 Met Ala Asn Thr Leu Glu Ser Ile Leu Asp Phe Ala Lys Gln Asn Asp  
 35 40 45  
 Ser Ala Asp Thr Glu Gly Ile Glu Pro Thr Tyr His Val Leu Asp Leu  
 50 55 60  
 Gln Asn Val Leu Arg Asp Asp Lys Ala Ile Glu Gly Ile Pro Gln Glu  
 65 70 75 80  
 Leu Ala Leu Lys Asn Ala Lys Glu Thr Glu Asp Gly Gln Phe Lys Val  
 85 90 95  
 Pro Ser Ile Met Asn Gly Glu Asp Ala  
 100 105

<210> 6158  
 <211> 70  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6158

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Lys | Ile | Tyr | Leu | Met | Ser | Glu | Tyr | Ile | Ser | Thr | Tyr | Ser | Thr | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr | Leu | Tyr | Ser | Val | Asn | Thr | Phe | Val | Leu | Tyr | Ile | Cys | Lys | Thr | Lys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Tyr | Val | Lys | Arg | Lys | Arg | Leu | Tyr | Lys | Leu | Leu | Gln | Pro | Leu | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Leu | Ile | Tyr | Asp | Tyr | Leu | Tyr | Glu | Ile | Ala | Lys | Gln | Ser | Tyr | Tyr | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Ile | Thr | Leu | Ser | Gln |     |     |     |     |     |     |     |     |     |     |
| 65  |     |     |     |     | 70  |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 6159

&lt;211&gt; 215

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6159

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Cys | Phe | Leu | Lys | Asn | Val | Ala | Gln | Asn | Cys | Ile | Met | Thr | Pro | Glu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu | Ser | Ser | Lys | Gln | Val | Lys | Ile | Ile | Asp | Lys | Lys | Ile | Glu | Gln | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Gln | Tyr | Leu | Gln | Arg | Lys | Asn | Asn | Leu | Asp | His | Ile | Gln | Phe | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Lys | Ile | Arg | Leu | Gly | Met | Gln | Val | Leu | Ala | Ile | Asn | Ile | Glu | Lys | Ser |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Val | Val | Tyr | Gly | Leu | Ala | Ile | Ile | Phe | His | Thr | Phe | Phe | Tyr | Thr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Leu | Leu | Thr | His | Leu | Ser | Tyr | Phe | Leu | Ile | Arg | Arg | His | Ala | His | Gly |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Thr | His | Ala | Asn | Ser | Ser | Leu | Leu | Cys | His | Ile | Gln | Asn | Ile | Ile | Phe |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Phe | Ile | Ile | Phe | Pro | Tyr | Leu | Ile | Ile | Lys | Leu | Asp | Ile | Asn | Tyr | Phe |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Val | Leu | Leu | Ser | Met | Ala | Leu | Val | Gly | Leu | Ile | Ile | Thr | Ile | Leu | Tyr |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ala | Pro | Ala | Ala | Thr | Lys | Lys | Gln | Pro | Ile | Pro | Arg | Arg | Leu | Val | Lys |
|     |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Arg | Lys | Lys | Ile | Leu | Ser | Ile | Phe | Leu | Tyr | Cys | Thr | Ile | Val | Val | Ile |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ser | Leu | Val | Thr | Lys | Glu | Pro | Val | Asn | Lys | Leu | Ile | Leu | Phe | Gly | Val |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ile | Leu | Glu | Ser | Leu | Thr | Leu | Leu | Pro | Ile | Phe | Phe | Pro | Lys | Glu | Asp |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ile | Asn | His | Gly | Lys | His | Phe |     |     |     |     |     |     |     |     |     |
|     | 210 |     |     |     |     | 215 |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 6160

&lt;211&gt; 99

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6160

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Val | Leu | Leu | Glu | Glu | Gly | Leu | Gln | Lys | Leu | Ile | Asp | Arg | His | His |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Thr | Ala | Thr | Ile | Asn | Arg | Ile | Tyr | Gly | Ser | Leu | Thr | Leu | Tyr | Phe |



2700

His Gln Phe Thr His Leu Thr Trp Glu Ile Lys Val Tyr Asn Val Thr  
 305 310 315 320  
 Ala Pro Leu Asn Ile Lys Glu Asn Asp Leu Pro Lys Gln Met Thr Trp  
 325 330 335  
 Phe Asn Leu Asp Asp Arg Glu Gln Tyr Thr Phe Pro Val Pro Met Asp  
 340 345 350  
 Lys Ile Tyr Lys Phe Ile Glu Gly  
 355 360

<210> 6162  
 <211> 54  
 <212> PRT  
 <213> S.epidermidis

<400> 6162  
 Pro Leu His Tyr Gly Thr Ile Lys Thr Glu Glu Glu Gly Phe Glu Pro  
 1 5 10 15  
 Pro Arg Ala Val Lys Leu Leu Ser Val Phe Lys Thr Asp Pro Phe Ser  
 20 25 30  
 Arg Thr Trp Val Phe Leu Gln Asn Tyr Met Asp Leu Ala Gly Leu Glu  
 35 40 45  
 Pro Ala Thr Glu Arg Leu  
 50

<210> 6163  
 <211> 111  
 <212> PRT  
 <213> S.epidermidis

<400> 6163  
 His Ser Ile Tyr Gln Ser Ala Lys Ser His Val Asn Glu Gly Gly Thr  
 1 5 10 15  
 Ile Met Leu Lys Pro Leu Gly Asn Arg Val Ile Ile Glu Lys Lys Glu  
 20 25 30  
 Gln Glu Gln Thr Thr Lys Ser Gly Ile Val Leu Thr Asp Ser Ala Lys  
 35 40 45  
 Glu Lys Ser Asn Glu Gly Val Ile Ile Ala Val Gly Gln Gly Arg Leu  
 50 55 60  
 Leu Asp Asn Gly Thr Gln Val Ala Pro Gln Val Ser Glu Gly Asp Thr  
 65 70 75 80  
 Ile Val Phe Gln Gln Tyr Ala Gly Thr Glu Val Lys Arg Gly Asp Lys  
 85 90 95  
 Thr Tyr Leu Ile Leu Asn Glu Glu Asp Ile Leu Ala Ile Ile Glu  
 100 105 110

<210> 6164  
 <211> 41  
 <212> PRT  
 <213> S.epidermidis

<400> 6164  
 Ile Asn Ile Tyr Lys Val Met Tyr Tyr Arg Val Met Leu Lys Leu Asn  
 1 5 10 15  
 Leu Arg Met Leu Leu Thr Ile His Ser Tyr Glu Ala Asn Arg Glu Glu  
 20 25 30  
 Arg Phe Tyr Val Ser Arg Lys Phe Phe

6162 6163 6164

35

40

<210> 6165  
 <211> 82  
 <212> PRT  
 <213> S.epidermidis

<400> 6165  
 Glu Ile Ser Leu Ser Cys His Lys Gly Ile Phe Ser Tyr Ala Val Val  
 1 5 10 15  
 Ile Tyr Pro Arg Ile Thr Arg Asp Ile Pro Val Ile Phe Ser Glu Pro  
 20 25 30  
 Ile Gly Phe Leu Leu Cys Gly Ile Ala Asp Asp Pro Phe Cys Pro Phe  
 35 40 45  
 Ala Asn Ala Ser Ser Thr Ser Leu Val Ser Val Phe Cys Lys Leu Arg  
 50 55 60  
 Ile Ser Thr Ala Asn Phe Ser Ile Asp Val Ala Ile Ser Ala Asn Val  
 65 70 75 80  
 Ala Met

<210> 6166  
 <211> 42  
 <212> PRT  
 <213> S.epidermidis

<400> 6166  
 Ile Lys Pro Tyr Leu Phe Tyr Tyr Thr Ala Asn Thr Gly Ile Ser Ile  
 1 5 10 15  
 Leu Lys Val Lys His Lys Lys Gln Arg Leu Leu Cys Gln Lys Lys  
 20 25 30  
 Arg Lys Gln Leu Leu Asn Ile Leu Ile Gln  
 35 40

<210> 6167  
 <211> 318  
 <212> PRT  
 <213> S.epidermidis

<400> 6167  
 Gln Tyr Met Tyr Lys Glu Ile Leu Lys Met Thr Lys Thr Phe Ile Phe  
 1 5 10 15  
 Gly His Lys Asn Pro Asp Thr Asp Ala Ile Ser Ser Ala Leu Ile Met  
 20 25 30  
 Ala Asp Phe Glu Gln Gln Thr Gly Asn Thr Glu Ala Lys Ala Tyr Arg  
 35 40 45  
 Leu Gly Glu Ile Ser Ala Glu Thr Gln Phe Ala Leu Asp Tyr Phe Asn  
 50 55 60  
 Val Glu Ala Pro Glu Leu Asn Glu Asp Leu Lys Gly Gln Asp Val  
 65 70 75 80  
 Ile Leu Val Asp His Asn Glu Phe Gln Gln Ser Ala Asp Thr Ile Ser  
 85 90 95  
 Asn Ala Thr Ile Lys His Val Ile Asp His His Arg Ile Ser Asn Phe  
 100 105 110  
 Glu Thr Ala Gly Pro Leu Tyr Tyr Arg Ala Glu Pro Val Gly Cys Ser  
 115 120 125





&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6169

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | His | Leu | Asp | Tyr | Leu | Cys | Arg | Phe | Ala | Val | Arg | Ala | Pro | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Tyr | Leu | Glu | Ala | Phe | Leu | Gly | Ser | Val | Lys | Ser | Thr | Thr | Arg | Gly |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Asn | Asn | Phe | Leu | Ser | Pro | Ser | Gln | Leu | Ser | Leu | Met | Ser | Ala | Gly | Phe |
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |

Ala

&lt;210&gt; 6170

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6170

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Pro | Phe | His | Cys | Ile | Glu | Lys | Asn | Arg | Ile | Glu | Phe | Glu | Leu | Ser |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Leu | Met | Val | Asn | Pro | Leu | Pro | Lys | Glu | Tyr | Ile | Cys | Asn | Leu | Met | Leu |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Leu | Met | Ile | Leu | Thr | His | Phe | Ser | Ser | Arg | Gln |     |     |     |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |

&lt;210&gt; 6171

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6171

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Ser | Ile | His | Ser | Val | Leu | Leu | Gly | Lys | Ile | Leu | Leu | Thr | Tyr | Pro |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Val | Phe | Asn | Val | Gln | Asn | Ile | Met | Val | Glu | Thr | Ser | Gly | Ile | Glu | Pro |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Leu | Thr | Ser | Cys | Val | Gln | Ser | Arg | Arg | Ser | Pro | Ser |     |     |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |

&lt;210&gt; 6172

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6172

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Val | Ala | Gln | Met | Ser | Lys | Lys | Phe | Arg | Val | Glu | Asp | Lys | Glu | Thr |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Ile | Ala | Asp | Cys | Leu | Asp | Arg | Met | Lys | Lys | Glu | Gly | Phe | Met | Pro | Ile |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Arg | Arg | Ile | Glu | Lys | Pro | Val | Tyr | Lys | Glu | Asn | Lys | Asp | Gly | Ser | Ile |
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Glu | Ile | Leu | Lys | Gln | Asp | Ile | Ile | Phe | Val | Gly | Ala | Leu | Ile | Gln |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 6173

&lt;211&gt; 378

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6173

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Ala His Asn His Tyr Leu Lys Tyr Met Arg Ser Tyr Asn Met Phe Ile
1      5      10
Asn Ala Lys Asp Phe Gly Leu Lys Gly Lys Ser Lys Tyr Lys Asp Thr
20      25      30
Arg Ala Ile Gln Lys Ala Leu Asn Tyr Ala Lys Lys Gly Arg His Thr
35      40      45
Val Tyr Ile Pro Lys Gly Thr Tyr Tyr Ile Arg Lys Ala Leu Val Ile
50      55      60
Tyr Asp Ser Thr Thr Leu Leu Glu Glu Gly Ala Thr Leu Leu Arg
65      70      75      80
Lys Gly Lys Asp Ala Leu Leu Lys Asn Gly Arg Arg Leu Lys Leu Tyr
85      90      95
His Gly Tyr Asn Gly Asn Ser His Ile Tyr Ile Lys Gly Gly Thr Phe
100      105      110
Asp Met Asn Gly Gly Glu Tyr Pro Tyr Asn Asn Thr Ala Met Cys Met
115      120      125
Gly His Ala Glu Asp Ile Gln Ile Leu Gly Val Thr Phe Lys Asn Ile
130      135      140
Val Gly Gly His Ala Leu Asp Ala Cys Gly Ile Asn Gly Leu His Ile
145      150      155      160
Ser Glu Cys Glu Phe Lys Gly Phe Leu Asp Ile Asp Gly Asp Arg Ser
165      170      175
Phe Ser Glu Ala Val Gln Leu Asp Ile Gln Val Pro Gly Ala Phe Pro
180      185      190
Lys Phe Gly Thr Thr Asp Gly Thr Ile Thr Lys Asn Val Val Ile Glu
195      200      205
Lys Cys Tyr Phe Gly Cys Ser Asp His Pro Lys Met Lys Ala Trp Asn
210      215      220
Arg Ala Ile Gly Ser His Ala Ser Arg Tyr Asn Cys Tyr Tyr Glu Asn
225      230      235      240
Ile His Ile Asn Gln Asn Ile Phe Asp Asn Leu Asn Glu Tyr Ala Leu
245      250      255
Thr Pro Leu Lys Ser Lys Asp Thr Phe Ile Thr Lys Asn Lys Phe Ile
260      265      270
Asn Cys Asn Gly Gly Ile Arg Phe Leu Gly Val Lys Asp Gly Lys Asn
275      280      285
Ala Ala Asp Pro Ile Thr Gly Gln Val Met Glu Thr Gln Ala Gly Glu
290      295      300
Asn Phe Asn Val Ile Gly Asn Thr Phe Ile Gly Lys Met Lys Arg Asp
305      310      315      320
Ala Ile His Ile Arg Ser Tyr His His Val Gln His Gln Asn Val Phe
325      330      335
Ile Ala Ala Asn Gln Phe Glu Asp Ala Ser Gln Ser Ile His Leu Glu
340      345      350
Asn Ile Asn Gly Leu Thr Leu Asn Gln Glu Gln Thr Lys Ile Lys Ile
355      360      365
Lys Ser Ile Asp Val Lys Asn Ile Ser Asn
370      375

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&lt;210&gt; 6174

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6174

Met Lys Leu His Cys Ala Tyr Ala Ile Leu Ile Arg Thr Arg Val Lys  
 1 5 10 15  
 Val Val Thr Gln Val Arg Ile Gln Ser Arg Trp Leu Ile Phe Ala Ile  
 20 25 30  
 Phe Leu Thr Gly Ala Ile Ser Leu Leu Ile Gly Leu Thr Tyr Tyr Lys  
 35 40 45  
 Ser Ile Lys Ser Val Asp Leu Ser Gly Tyr Ser Val Asn Gln Ile Ser  
 50 55 60  
 Leu Asn His Gly Phe Asn Gln Lys Gly Phe Val Val Asn Lys Lys Ile  
 65 70 75 80  
 Lys Leu Asp Arg Tyr Thr Phe Tyr Asn Asp Lys Asn His Lys Asp Phe  
 85 90 95  
 Thr Val Lys Val Lys Asn Lys Thr His Lys Val Lys Gly Met Val Leu  
 100 105 110  
 Val Lys Asp Asp Lys Val Glu Thr Asn Phe Gly Ile Lys Met Gly Asp  
 115 120 125  
 Pro Ile Asp Lys Val Ile Asn Lys Leu Gly Glu Asn Tyr Lys Ile Asn  
 130 135 140  
 Lys Val Gly Lys Asn Tyr His Ser Met Thr Tyr Val Asp Arg Phe Asn  
 145 150 155 160  
 Lys Leu Lys Leu Asn Ile Leu Tyr Lys Asp Asn Ile Val Lys Arg Ile  
 165 170 175  
 Glu Phe Phe Ser Lys  
 180

&lt;210&gt; 6175

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6175

Val Thr Met His Val Leu Thr Val Pro Asn Gln Lys Ala Thr Ala Asn  
 1 5 10 15  
 Tyr Val Pro Ala Ala Ala Val Ile Arg Arg Trp Gln Ala Leu Ser Gly  
 20 25 30  
 Ile Ile Gly Arg Lys Ala Arg Val Gly Gly Phe Leu Ser Leu Met  
 35 40 45

&lt;210&gt; 6176

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6176

Gln Thr Phe Lys Leu Thr Ile Ile Phe Trp Gln Gly Val Ser Ser Asn  
 1 5 10 15  
 Met Lys Ala Thr Arg Val Phe Asn Val Val Val Phe Leu Gln Phe Ser  
 20 25 30  
 Thr Tyr Leu Leu Phe Gly Met Asn Ile Gln Leu Leu Phe Asp Lys Lys  
 35 40 45  
 Glu Ser Asp Tyr Leu Phe Phe Ile Ile Pro Leu Phe Phe Thr Tyr Ile  
 50 55 60  
 Phe Asp Asn Ser Tyr Thr Val Leu Ile Asp Phe Cys Lys Pro Thr Glu

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |
| Lys | Leu | Lys | Lys | Val | Glu | Ser | Asn | Asn | Ile | Arg | Phe | Ile | Asn | Ile |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     | 95  |     |
| Met | Leu | Leu | Ala | Ile | Ile | Ile | Tyr | Ala | Tyr | Ile | Tyr | Lys | Asn | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |
| Ile | Arg | Trp | Phe | Lys | Asp | Leu | Val | Asp | Ser | Ala | Asn | Glu | Asn | Trp |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     | Cys |
| Leu | Ser | Ile | Ile | Leu | Ile | Ile | Ile | Met | Ser | Leu | Leu | Ile | Ser | Tyr |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     | Ile |
| Trp | Ser | Lys | Tyr | Phe | Ile | Lys | Ser | Asp | Tyr | Ile | Glu | Lys | Leu | Lys |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |
| Glu | Asp | Phe | Asp | Ile | Leu | Gly | Ile | Glu | Asn | Val | Ile | Asn | Trp | Leu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |
| Lys | Ser | Asn | Ile | Lys | Ser | Lys | Asp | Ile | Ser | Glu | Gly | Thr | Asn | Val |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 | Glu |
| Ile | Glu | Lys | Ile | Glu | Leu | Leu | Leu | Lys | Asp | Glu | Lys | Asn | Ile | Asp |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     | Asp |
| Phe | Ser | Tyr | Gly | Glu | Val | Lys | Ser | Ile | Leu | Ala | Tyr | Val | Lys | Tyr |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     | Val |
| Arg | Glu | Ser | Lys |     |     |     |     |     |     |     |     |     |     |     |
| 225 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 6177

&lt;211&gt; 434

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6177

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Glu | Val | Lys | Thr | Met | Met | Asn | Pro | Leu | Ala | Gln | Lys | Leu | Asn | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu | Ile | Lys | Gln | Ser | Ser | Pro | Glu | Val | Leu | Asp | Met | Met | Ser | Gln | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Lys | Asp | Met | Phe | Tyr | Pro | Lys | Gly | Ile | Leu | Ser | Gln | Ser | Ala | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Lys | Arg | Thr | Thr | Tyr | Asn | Ala | Thr | Ile | Gly | Met | Ala | Thr | Lys | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Gly | Lys | Met | Tyr | Ala | Asn | Ser | Leu | Asn | Gln | Met | Phe | Asn | Asp | Leu |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Thr | Pro | Asp | Glu | Ile | Phe | Pro | Tyr | Ala | Pro | Pro | Gln | Gly | Val | Glu | Glu |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Arg | Asp | Leu | Trp | Gln | Lys | Lys | Met | Leu | Lys | Glu | Asn | Pro | Asp | Leu |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Lys | Ser | Lys | Ser | Ile | Ser | Arg | Pro | Ile | Val | Thr | Asn | Ala | Leu | Thr | His |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gly | Leu | Ser | Leu | Val | Ala | Asp | Leu | Phe | Val | Asp | Thr | Asp | Asp | Thr | Val |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Leu | Pro | Thr | His | Asn | Trp | Gly | Asn | Tyr | Lys | Leu | Val | Phe | Ser | Thr |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     |     | 160 |
| Arg | His | Gly | Ala | His | Ile | Asp | Thr | Tyr | Ser | Ile | Phe | Asp | Asn | Ser | Gly |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| His | Phe | Thr | Thr | Ser | Glu | Leu | Val | Lys | Thr | Leu | Lys | Glu | Tyr | Lys | Lys |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Asp | Lys | Val | Ile | Ile | Ile | Leu | Asn | Tyr | Pro | Asn | Asn | Pro | Thr | Gly | Tyr |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Thr | Pro | Asn | Lys | Glu | Glu | Val | Asn | Thr | Ile | Val | Asn | Ala | Ile | Glu | Glu |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |

Leu Ala Asn Lys Gly Thr Lys Val Val Thr Val Val Asp Asp Ala Tyr  
 225 230 235 240  
 Tyr Gly Leu Phe Tyr Glu Glu Val Tyr Gln Gln Ser Ile Phe Thr Ala  
 245 250 255  
 Leu Thr Gln Val Lys Ser Ser Asn Leu Leu Pro Val Arg Leu Asp Gly  
 260 265 270  
 Ala Thr Lys Glu Phe Phe Ser Trp Gly Phe Arg Val Gly Phe Met Thr  
 275 280 285  
 Phe Gly Ile Asp His Glu Thr Leu Lys Asn Ala Leu Glu Ala Lys Val  
 290 295 300  
 Lys Gly Leu Ile Arg Ser Asn Ile Ser Ser Ser Pro Leu Pro Ser Gln  
 305 310 315 320  
 Ser Ala Ile Lys His Val Leu Lys His His Glu Gln Phe Asp Lys Glu  
 325 330 335  
 Ile Asp Gln Asn Ile Asn Ile Leu Lys Glu Arg Tyr Glu Val Thr Lys  
 340 345 350  
 Gln Val Val Tyr Asp Asn Lys Tyr Ala Lys Tyr Trp Gln Ala Tyr Asp  
 355 360 365  
 Phe Asn Ser Gly Tyr Phe Met Ser Leu Lys Leu Asn Gln Val Asp Pro  
 370 375 380  
 Glu Glu Leu Arg Glu His Leu Ile Asn Asn Tyr Ser Ile Gly Ile Ile  
 385 390 395 400  
 Ala Leu Asn Ser Thr Asp Ile Arg Ile Ala Phe Ser Cys Val Glu Lys  
 405 410 415  
 Glu Asp Ile Pro Tyr Val Phe Glu Ser Ile Ala Asn Ala Ile Asp Asp  
 420 425 430  
 Ile Lys

<210> 6178

<211> 177

<212> PRT

<213> S.epidermidis

<400> 6178

Phe Met Ala Asn Thr Asn Arg Lys Ser Lys Lys Met Ser Asp Ala Lys  
 1 5 10 15  
 Cys Ile Lys Thr Arg Gln Val Tyr Pro Gln Asp Thr Asn His His His  
 20 25 30  
 Thr Met Phe Gly Gly Thr Leu Met Ala Asn Ile Asp Glu Ile Ala Ala  
 35 40 45  
 Ile Thr Ala Met Lys His Ala Gly Asn Pro Val Val Thr Ala Ser Thr  
 50 55 60  
 Asp Ser Val Asp Phe Leu Arg Pro Ile Thr Thr Gly Asp Ile Leu Ser  
 65 70 75 80  
 Tyr Glu Ala Met Val Ser Tyr Ala Gly Thr Ser Ser Met Glu Ile Cys  
 85 90 95  
 Val Gln Ile Val Ile Asp Asp Val Tyr Lys Asn Glu Arg His Leu Ala  
 100 105 110  
 Ala Leu Ser Phe Leu Thr Phe Val Ala Leu Asp Ser Asp Gly Lys Pro  
 115 120 125  
 Thr Ser Val Pro Asp Val Glu Pro Glu Thr Ser Val Glu Lys Trp Phe  
 130 135 140  
 His Glu Thr Ala Pro Gln Arg Val Ala Arg Arg Lys Glu Arg Arg Lys  
 145 150 155 160  
 Glu Ser Ile Asp Thr Ile Glu Tyr Leu Ser Arg Val Arg His Ile Glu

Lys

<400> 6179

|            |            |            |            |            |     |            |            |            |            |            |            |           |     |           |     |
|------------|------------|------------|------------|------------|-----|------------|------------|------------|------------|------------|------------|-----------|-----|-----------|-----|
| His<br>1   | Asp        | Tyr        | Lys        | Lys<br>5   | Met | Lys        | Thr        | Ser        | Tyr<br>10  | Arg        | Asn        | Gln       | Leu | Glu<br>15 | Lys |
| Asn        | Tyr        | Asp        | Ser<br>20  | Arg        | Ile | Thr        | Gly        | Lys<br>25  | Arg        | Leu        | Asn        | Glu<br>30 | Glu | Thr       | Leu |
| Leu        | Phe        | Leu        | Gly<br>35  | Thr        | Gly | Ala        | Ile<br>40  | Ala        | Gln        | Arg        | Ala<br>45  | Ala       | Tyr | Leu       | Ala |
| Lys        | Ala<br>50  | Phe        | Gly        | Met        | Lys | Val<br>55  | Ile        | Gly        | Val        | Ser<br>60  | Lys        | Ser       | Gly | Lys       | Asn |
| Val<br>65  | Glu        | His        | Phe        | Asp<br>70  | Glu | Val        | Tyr        | Thr        | Ile<br>75  | Glu        | Glu        | Leu       | Asp | Asp       | Val |
| Ile        | Glu        | Lys        | Ala<br>85  | Asn        | Ile | Ile        | Val        | Asn<br>90  | Ala        | Leu        | Pro        | Glu<br>95 | Thr | Glu       | Glu |
| Thr        | Ile        | Tyr        | Leu<br>100 | Leu        | Lys | Arg        | Lys<br>105 | Asp        | Phe        | Ile        | Gln<br>110 | Met       | Asp | Asn       | Asn |
| Ala        | Leu        | Phe<br>115 | Ile        | Asn        | Val | Gly<br>120 | Arg        | Gly        | Thr        | Ile<br>125 | Val        | Asp       | Glu | Glu       | Val |
| Leu        | Ile<br>130 | Asn        | Val        | Leu        | Lys | Asp<br>135 | Arg        | Leu        | Ile        | Arg<br>140 | His        | Ala       | Tyr | Leu       | Asp |
| Val<br>145 | Phe        | Glu        | Lys        | Glu<br>150 | Pro | Leu        | Ser        | Lys        | Asp<br>155 | Asn        | Pro        | Leu       | Tyr | Asp       | Leu |
| Asp        | Asn        | Val        | Thr<br>165 | Ile        | Thr | Ala        | His        | Ile<br>170 | Thr        | Gly        | Asn        | Asp       | Ser | Asn       | Asn |
| Asn        | Arg        | Glu<br>180 | Ala        | Thr        | Asp | Ile        | Phe<br>185 | Lys        | Lys        | Asn<br>190 | Leu        | Glu       | His | Phe       | Leu |
| Asn        | Asn        | Tyr<br>195 | Asp        | Val        | Ile | Glu<br>200 | Asn        | Lys        | Val        | Asp<br>205 | Leu        | Asp       | Tyr | Gly       | Tyr |

<400> 6180

<210> 6181

<400> 6181

Met Ala Asn Lys Gln Val Glu Ile Ser Met Ala Glu Trp Asp Val Met  
 1 5 10 15  
 Asn Ile Ile Trp Asn Lys Lys Ser Val Ser Ala Asn Glu Ile Val Val  
 20 25 30  
 Glu Ile Gln Lys Asn Lys Glu Val Ser Asp Lys Thr Ile Arg Thr Leu  
 35 40 45  
 Ile Thr Arg Leu Tyr Lys Lys Glu Ile Ile Lys Arg Tyr Lys Tyr Asn  
 50 55 60  
 Asn Ile Tyr Phe Tyr Ser Ser Ile Ile Lys Glu Asp Asp Ile Lys Met  
 65 70 75 80  
 Lys Thr Ala Lys Thr Phe Leu Asn Lys Leu Tyr Gly Gly Asp Met Lys  
 85 90 95  
 Ser Leu Val Leu Asn Phe Ala Lys Asn Glu Glu Leu Asn Asn Lys Glu  
 100 105 110  
 Ile Glu Glu Leu Arg Asp Ile Leu Asn Asp Ile Ser Lys Lys  
 115 120 125

<210> 6182  
 <211> 51  
 <212> PRT  
 <213> S.epidermidis

<400> 6182  
 Ile Val Cys Asn Val Ser Leu Leu Phe Ile Gly Ile Asn Val Asp Ile  
 1 5 10 15  
 Leu Ser Phe Ser Phe Gln Cys Ser Leu Thr Leu Thr Ile His Tyr Cys  
 20 25 30  
 Asn Lys Gln Asn Leu Leu Ser Gln Glu Leu Ile Cys Ile Ser Phe Leu  
 35 40 45  
 Val Ile Ser  
 50

<210> 6183  
 <211> 98  
 <212> PRT  
 <213> S.epidermidis

<400> 6183  
 Lys Ser Cys Lys Glu Val Ile Glu Met Asn Leu Glu Lys Ile Tyr Glu  
 1 5 10 15  
 Glu Ile Ser Asn Glu Ile Lys Ala Met Thr Asp Asp Glu Ile Lys Glu  
 20 25 30  
 Val Ser Asp Ile Leu Tyr Glu Ser Lys Leu Leu Asn Val Asp Tyr Ser  
 35 40 45  
 Asn Leu Lys Ser Phe Lys Ala Asp Thr Lys His Ser Tyr Lys Val Lys  
 50 55 60  
 Glu Asn Glu Tyr Asn Val Ile Glu Lys Asn Ile Asn Glu Lys Pro Asn  
 65 70 75 80  
 Leu Glu Asn His Glu Val Asn Gln Val Lys Asn Asn Asn Ile Ile Ile  
 85 90 95  
 Ala Ala

<210> 6184  
 <211> 100  
 <212> PRT





Val Gln Arg Lys Val Lys Asn Asp Leu Ile Lys Ala Leu Lys Lys Thr  
 260 265 270  
 Ile Thr Glu Phe Tyr Gly Glu Asn Ile Glu Lys Ser Pro Asp Phe Gly  
 275 280 285  
 Arg Ile Val Asn Gln Lys His Phe Asn Arg Leu Asn Asp Leu Ile Gln  
 290 295 300  
 Ile His Lys Asp Asn Val Val Phe Gly Gly Asn Ser Ser Lys Glu Asp  
 305 310 315 320  
 Leu Tyr Ile Glu Pro Thr Leu Leu Asp Asn Ile Thr Asn Asp Asn Lys  
 325 330 335  
 Ile Met Lys Glu Glu Ile Phe Gly Pro Ile Leu Pro Ile Ile Thr Tyr  
 340 345 350  
 Asp Asn Phe Asp Glu Val Leu Glu Ile Ile Gln Ser Lys Ser Lys Pro  
 355 360 365  
 Leu Ser Leu Tyr Leu Phe Ser Glu Asp Glu Asn Met Thr His Arg Val  
 370 375 380  
 Val Glu Glu Leu Ser Phe Gly Gly Gly Ala Ile Asn Asp Thr Leu Met  
 385 390 395 400  
 His Leu Ala Asn Pro Asn Leu Pro Phe Gly Gly Val Gly Ser Ser Gly  
 405 410 415  
 Ile Gly Gln Tyr His Gly Lys Tyr Ser Phe Asp Thr Phe Ser His Met  
 420 425 430  
 Lys Ser Tyr Thr Phe Lys Ser Thr Arg Leu Glu Ser Ser Leu Phe Phe  
 435 440 445  
 Pro Pro Tyr Lys Gly Lys Phe Lys Tyr Ile Lys Thr Phe Phe Lys Asn  
 450 455 460

&lt;210&gt; 6186

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6186

Ala Asn Ile Leu Val Val Trp Ala Thr Pro His Pro Phe Pro Leu Asn  
 1 5 10 15  
 Ile Tyr Phe Gly Thr Leu Ala Gly Gly Leu Gly Cys Phe Pro Phe Glu  
 20 25 30  
 His Gly Pro Tyr His Pro Cys Ser Asp Ser Gln Val Lys Leu Ile Gly  
 35 40 45  
 Ile Arg Ser Leu Ser Glu Phe Gly Asn Pro Arg Gly Ala Pro Arg Pro  
 50 55 60  
 Asn Ser Ala Leu Pro Pro Ile Ile Ile Thr  
 65 70

&lt;210&gt; 6187

&lt;211&gt; 66

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6187

Thr Thr Leu Asn Ser Ile Thr Leu Tyr Asn Ile Val Cys Gly Leu Phe  
 1 5 10 15  
 Ser Thr Met Leu Gln Phe Asn Cys Ile His Val Leu Tyr Tyr Thr Thr  
 20 25 30  
 Pro Ser Leu Val Pro Ala Asp Leu Gly Phe Phe Gly His Leu Phe Ala  
 35 40 45

Phe Pro Phe Tyr Phe Gln Pro Asn Thr Lys Asp Asn Glu Tyr Ala Thr  
 50 55 60  
 Gly Asn  
 65

<210> 6188  
 <211> 49  
 <212> PRT  
 <213> S.epidermidis

<400> 6188  
 Leu Asn Asn Asn Tyr Lys Tyr Asn Leu Asn Ile Ser Leu Ile Tyr Ser  
 1 5 10 15  
 Val Asn Leu Phe Tyr Ser His Lys Lys Ile Ala Met Lys Lys Ser Ile  
 20 25 30  
 Asn Leu Asn Phe Phe Ile Ala Asn Phe Phe His Leu Asn Leu Leu Thr  
 35 40 45  
 Ala

<210> 6189  
 <211> 195  
 <212> PRT  
 <213> S.epidermidis

<400> 6189  
 Arg Phe Leu Asn Thr Tyr Trp Glu Ala Val Leu Met Ser Asn Lys Ala  
 1 5 10 15  
 Leu Ile Ile Val Asp Tyr Ser Phe Asp Phe Ile Asp Asp Asn Gly Lys  
 20 25 30  
 Leu Thr Cys Gly Lys Pro Gly Gln Glu Ile Glu Thr Phe Ile Thr Gln  
 35 40 45  
 Arg Ile Lys Asn Tyr His Asn Asn Gln Gln Glu Ile Phe Phe Leu Met  
 50 55 60  
 Asp Leu His Tyr Glu Asn Asp Lys Phe His Pro Glu Ser Lys Leu Phe  
 65 70 75 80  
 Pro Asn His Asn Ile His Gln Thr Pro Gly Arg Glu Leu Tyr Gly Glu  
 85 90 95  
 Val Gly Arg Leu Tyr Asn Ser Ile Lys Asp Gln Met Asn Val His Tyr  
 100 105 110  
 Leu Asp Lys Thr Arg Tyr Asp Ser Phe Tyr Gly Thr Pro Leu Asp Ser  
 115 120 125  
 Leu Leu Arg Glu Arg Gln Ile Asn Asp Ile Glu Ile Val Gly Val Cys  
 130 135 140  
 Thr Asp Ile Cys Ile Leu His Thr Ala Val Ser Ala Tyr Asn Leu Gly  
 145 150 155 160  
 Tyr Asn Ile Thr Ile Pro Ile Arg Gly Val Ala Ser Phe Asn Gln Asp  
 165 170 175  
 Gly His Gln Trp Ala Leu Ser His Phe Lys Asn Ser Leu Gly Ala Lys  
 180 185 190  
 Val Glu Glu  
 195

<210> 6190  
 <211> 56  
 <212> PRT

<213> S.epidermidis

<400> 6190

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Thr Ser Leu Lys Asn Leu Ala Ile Leu Leu Ser Phe Thr Ala Pro Val
1          5          10          15
Leu Asn Lys Leu Asp Lys Asp Gln Ser Ser Leu Thr Ile Ser Phe Lys
          20          25          30
Lys Arg Tyr Leu Asn Ser Lys Phe Lys Phe Leu Leu Leu Ile Leu Lys
          35          40          45
Lys Thr Phe Phe Leu Leu Ser Leu
          50          55

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<210> 6191

<211> 128

<212> PRT

<213> S.epidermidis

<400> 6191

```

Met Lys Ile Lys Gln Phe Ser Phe Gln His Ile Leu Phe Leu Ile Trp
1          5          10          15
Lys Lys Leu Gln Ile Ile Ser Phe Phe Leu Ser Glu Gly Glu Ile Ile
          20          25          30
Phe Asn Glu Ser Lys Asp Lys Leu Ser Gln Lys Tyr Gln Ile Leu Asn
          35          40          45
Gly Ser Asn Glu His Gly His Glu Glu Leu Asp Glu Leu Leu Ile Tyr
          50          55          60
Lys Glu Ser Lys Gln Thr Gly Tyr Ile Gly Leu Thr Glu Tyr Tyr Gln
65          70          75          80
Thr Phe Asn Glu Leu Phe Gly Ser Gly Val Glu Ile Lys Asp Ala Ser
          85          90          95
Ile Glu Gln Leu Met Ile Tyr Leu Glu Lys Ser Lys His Lys Arg Asn
          100          105          110
Thr Asn Ser Lys Tyr Lys Val Arg Phe Asn Tyr Glu Ala Ile Asn Asp
          115          120          125

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<210> 6192

<211> 47

<212> PRT

<213> S.epidermidis

<400> 6192

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Leu Phe Val Asn Asn Lys Ile Gln Glu Tyr Phe Tyr Phe Asn Tyr Tyr
1          5          10          15
Leu Ile Ile Lys Cys Lys Leu Lys Leu Tyr Pro Lys Pro Asn Lys Ile
          20          25          30
Ser Lys Phe Met Leu Val Gln Tyr Ser Cys Met Tyr Arg Leu Thr
          35          40          45

```

<210> 6193

<211> 43

<212> PRT

<213> S.epidermidis

<400> 6193

```

Val Thr Ala Lys Pro Ser Phe Thr Ile Glu Pro Cys Gly Ser Ile Tyr
1          5          10          15

```

Tyr Pro Val Leu Ala Pro Val Ser Arg Ser Tyr Pro Ser Leu Ile Gly  
 20 25 30  
 Arg Leu Ser Thr Cys Tyr Ser Pro Val Arg Arg  
 35 40

<210> 6194  
 <211> 540  
 <212> PRT  
 <213> S.epidermidis

<400> 6194  
 Thr Met Ala Lys Asp Leu Lys Phe Ser Glu Asp Ala Arg Gln Ala Met  
 1 5 10 15  
 Leu Arg Gly Val Asp Lys Leu Ala Asn Ala Val Lys Val Thr Ile Gly  
 20 25 30  
 Pro Lys Gly Arg Asn Val Val Leu Asp Lys Asp Tyr Thr Thr Pro Leu  
 35 40 45  
 Ile Thr Asn Asp Gly Val Thr Ile Ala Lys Glu Ile Glu Leu Glu Asp  
 50 55 60  
 Pro Tyr Glu Asn Met Gly Ala Lys Leu Val Gln Glu Val Ala Asn Lys  
 65 70 75 80  
 Thr Asn Glu Ile Ala Gly Asp Gly Thr Thr Thr Ala Thr Val Leu Ala  
 85 90 95  
 Gln Ser Met Ile Gln Glu Gly Leu Lys Asn Val Thr Ser Gly Ala Asn  
 100 105 110  
 Pro Val Gly Leu Arg Gln Gly Ile Asp Lys Ala Val Gln Val Ala Ile  
 115 120 125  
 Glu Ala Leu His Glu Ile Ser Gln Lys Val Glu Asn Lys Asn Glu Ile  
 130 135 140  
 Ala Gln Val Gly Ala Ile Ser Ala Ala Asp Glu Glu Ile Gly Arg Tyr  
 145 150 155 160  
 Ile Ser Glu Ala Met Asp Lys Val Gly Asn Asp Gly Val Ile Thr Ile  
 165 170 175  
 Glu Glu Ser Asn Gly Phe Asn Thr Glu Leu Glu Val Val Glu Gly Met  
 180 185 190  
 Gln Phe Asp Arg Gly Tyr Gln Ser Pro Tyr Met Val Thr Asp Ser Asp  
 195 200 205  
 Lys Met Ile Ala Glu Leu Glu Arg Pro Tyr Ile Leu Val Thr Asp Lys  
 210 215 220  
 Lys Ile Ser Ser Phe Gln Asp Ile Leu Pro Leu Leu Glu Gln Val Val  
 225 230 235 240  
 Gln Ala Ser Arg Pro Ile Leu Ile Val Ala Asp Glu Val Glu Gly Asp  
 245 250 255  
 Ala Leu Thr Asn Ile Val Leu Asn Arg Met Arg Gly Thr Phe Thr Ala  
 260 265 270  
 Val Ala Val Lys Ala Pro Gly Phe Gly Asp Arg Arg Lys Ala Met Leu  
 275 280 285  
 Glu Asp Leu Ala Ile Leu Thr Gly Ala Gln Val Ile Thr Asp Asp Leu  
 290 295 300  
 Gly Leu Glu Leu Lys Asp Ala Ser Leu Asp Met Leu Gly Thr Ala Asn  
 305 310 315 320  
 Lys Val Glu Val Thr Lys Asp His Thr Thr Val Val Asp Gly Asn Gly  
 325 330 335  
 Asp Glu Asn Asn Ile Asp Ala Arg Val Gly Gln Ile Lys Ala Gln Ile  
 340 345 350  
 Glu Glu Thr Asp Ser Glu Phe Asp Lys Glu Lys Ile Thr Glu Ser Leu

355 360 365  
 Gly Lys Leu Pro Gly Gly Val Ala Val Asn Gln Val Trp Gly Gly Ser  
 370 375 380  
 Glu Thr Glu Leu Lys Glu Arg Lys Leu Arg Ile Glu Asp Ala Leu Asn  
 385 390 395 400  
 Ser Thr Arg Ala Ala Val Glu Glu Gly Ile Val Ala Gly Gly Gly Thr  
 405 410 415  
 Ala Leu Val Asn Ile Tyr Gln Lys Val Ser Glu Ile Lys Ala Glu Gly  
 420 425 430  
 Asp Val Glu Thr Gly Val Asn Ile Val Leu Lys Ala Leu Gln Ala Pro  
 435 440 445  
 Val Arg Gln Ile Ala Glu Asn Ala Gly Leu Glu Gly Ser Ile Ile Val  
 450 455 460  
 Glu Arg Leu Lys His Ala Glu Ala Gly Val Gly Phe Asn Ala Ala Thr  
 465 470 475 480  
 Asn Glu Trp Val Asn Met Leu Glu Glu Gly Ile Val Asp Pro Thr Lys  
 485 490 495  
 Val Thr Arg Ser Ala Leu Gln His Ala Ala Ser Val Ala Ala Met Phe  
 500 505 510  
 Leu Thr Thr Glu Ala Val Val Ala Ser Ile Pro Glu Pro Glu Asn Asn  
 515 520 525  
 Glu Gln Pro Gly Met Gly Gly Met Pro Gly Met Met  
 530 535 540

<210> 6195  
 <211> 117  
 <212> PRT  
 <213> S.epidermidis

<400> 6195  
 Asn Asn Lys Lys Tyr Ser Gly Gly Leu Ile Leu Lys Ile Val Ser Leu  
 1 5 10 15  
 Asn Arg Leu Asn Glu Ile Glu Asn Glu Leu Arg Lys Gln Phe Pro Asn  
 20 25 30  
 Glu Glu Phe Lys Phe Tyr Asp Lys Ala Ile Asn Ile Pro Ile Asn Asp  
 35 40 45  
 Arg Lys Thr Met Asp Ile Leu Ile Gly Tyr Asp Gly Lys Ile Asp Arg  
 50 55 60  
 Thr Phe Ile Glu His Cys Ile Asn Leu Lys Trp Ile Gly Trp Phe Ala  
 65 70 75 80  
 Thr Gly Val Asn Asn Leu Pro Leu Asn Tyr Ile Lys Glu Arg Asp Ile  
 85 90 95  
 Ile Leu Arg Asn Gly Lys Gly Ile Gln Ala Lys Gln Val Ser Glu Tyr  
 100 105 110  
 Ile Lys Thr Phe Ile  
 115

<210> 6196  
 <211> 279  
 <212> PRT  
 <213> S.epidermidis

<400> 6196  
 Arg Met Lys Lys Leu Phe Ile Ser Gly Leu Ile Ile Phe Ile Ile Phe  
 1 5 10 15  
 Phe Ala Ser Gly Ala Met Thr Trp Phe Thr Ile Asp Lys Asn Lys Tyr

20 25 30  
 Asp Asn Arg His Tyr Thr Lys Thr Ile Asn Ser Lys Ile Glu His Leu  
 35 40 45  
 Ser Ile Ser Thr Val Thr Thr Asn Val Asn Ile Ile Ser Gly Lys Lys  
 50 55 60  
 Leu Ala Val Tyr Phe Thr Gly Asp Asn Lys Ile Asn Val Thr Lys Asn  
 65 70 75 80  
 Asn Lys Arg Leu Ser Ile Lys Glu Lys Arg Ala Val Asp Arg Gly Tyr  
 85 90 95  
 Gly Leu Asn Phe Asn Pro Phe His Ser Asn Asn Arg Lys Leu Thr Ile  
 100 105 110  
 Val Val Pro Glu Lys Asp Leu Lys Ser Leu Asn Ile Gln Ser Leu Leu  
 115 120 125  
 Gly Glu Ile Asp Leu Asn Gln Val Asn Leu Lys His Val Ser Leu Glu  
 130 135 140  
 Thr Asp Arg Ile Ile Gln Leu Lys Arg Ser Glu Leu Asn Gln Val Asn  
 145 150 155 160  
 Ile Glu Ser Ser Lys Ala Asn Phe Tyr Ile Thr Asp Cys Leu Ile Arg  
 165 170 175  
 Glu Gly Arg Met Lys Leu Asp Lys Gly Ile Thr His Val Lys Asn Ser  
 180 185 190  
 Thr Leu Ser Asp Thr Val Phe Leu Val Asn Arg Gly Asp Ile Ser Met  
 195 200 205  
 Thr Asp Met Lys Ser Asn Asn Asp Ile Lys Ala Ser Thr Gln Arg Gly  
 210 215 220  
 Asn Ile Asn Tyr His Phe Gly Glu Lys Pro Lys Asn Thr Leu Leu Lys  
 225 230 235 240  
 Leu His Pro Gly His Gly Asn Lys Glu Ile Lys Asn Arg Tyr Phe Asp  
 245 250 255  
 Lys Gly Lys Val Gly Asn Ser Asp Asn Ile Leu Glu Phe Tyr Thr Val  
 260 265 270  
 Asp Gly Asp Ile Lys Ile Glu  
 275

<210> 6197  
 <211> 53  
 <212> PRT  
 <213> S.epidermidis

<400> 6197  
 Ile Ile Arg Lys Cys Leu Ile Phe Leu Glu Tyr Phe Asn Val Lys Leu  
 1 5 10 15  
 His Ile Arg Ala Lys Tyr Phe Gly Glu Thr His Glu Gly Thr Gly Gln  
 20 25 30  
 Ala Glu Asp Leu Tyr Arg Leu Lys Leu Ser His Lys Lys Ala Ser Gln  
 35 40 45  
 Gln Tyr Lys Val Leu  
 50

<210> 6198  
 <211> 52  
 <212> PRT  
 <213> S.epidermidis

<400> 6198  
 Ile Ile Arg Lys Gly Leu Ile Phe Leu Lys Tyr Phe Asn Val Lys Leu

2717

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   |     | 5   |     | 10  |     | 15  |     |     |     |     |     |     |     |     |     |
| His | Met | Asn | Thr | Lys | Tyr | Phe | Gly | Glu | Thr | Leu | Glu | Gly | Thr | Gly | Gln |
|     |     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |
| Ala | Glu | Asp | Tyr | Arg | Leu | Lys | Leu | Ser | Pro | Lys | Lys | Ala | Ser | Gln | Gln |
|     |     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |
| Tyr | Glu | Val | Leu |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 50  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6199

<211> 213

<212> PRT

<213> S.epidermidis

<400> 6199

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Lys | Arg | Asn | Asn | Met | Ser | Ala | Ile | Ala | Gln | Asn | Pro | Trp | Leu | Met |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Val | Leu | Ala | Ile | Phe | Ile | Ile | Asn | Val | Cys | Tyr | Val | Thr | Phe | Leu | Thr |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Met | Arg | Thr | Ile | Leu | Thr | Leu | Lys | Gly | Tyr | Arg | Tyr | Val | Ala | Ala | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | Ser | Phe | Met | Glu | Val | Leu | Val | Tyr | Val | Val | Gly | Leu | Gly | Leu | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Met | Ser | Ser | Leu | Asp | Gln | Ile | Gln | Asn | Ile | Phe | Ala | Tyr | Ala | Leu | Gly |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Phe | Ser | Val | Gly | Ile | Ile | Val | Gly | Met | Lys | Ile | Glu | Glu | Lys | Leu | Ala |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Leu | Gly | Tyr | Thr | Val | Val | Asn | Val | Thr | Ser | Ser | Glu | Tyr | Glu | Leu | Asp |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Leu | Pro | Asn | Glu | Leu | Arg | Asn | Leu | Gly | Tyr | Gly | Val | Thr | His | Tyr | Glu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala | Phe | Gly | Arg | Asp | Gly | Ser | Arg | Met | Val | Met | Gln | Ile | Leu | Thr | Pro |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Arg | Lys | Tyr | Glu | Leu | Lys | Leu | Met | Asp | Thr | Val | Lys | Asn | Leu | Asp | Pro |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Lys | Ala | Phe | Ile | Ile | Ala | Tyr | Glu | Pro | Arg | Asn | Ile | His | Gly | Gly | Phe |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Trp | Val | Lys | Gly | Val | Arg | Lys | Arg | Lys | Leu | Lys | Ala | Tyr | Glu | Pro | Glu |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |     |
| Gln | Leu | Glu | Val | Val | Val | Asp | His | Glu | Glu | Ile | Val | Gly | Gly | Ser | Ser |
|     |     | 195 |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| Asn | Glu | Gln | Lys | Val |     |     |     |     |     |     |     |     |     |     |     |
|     | 210 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6200

<211> 191

<212> PRT

<213> S.epidermidis

<400> 6200

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Val | Ile | Glu | Pro | Tyr | Asn | Lys | Tyr | Arg | Ser | Glu | Asn | Met | Lys | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Lys | Leu | Thr | Ser | Leu | Thr | Leu | Ala | Ala | Leu | Thr | Leu | Ala | Phe | Pro |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Phe | Ser | His | Val | Ala | Gln | Ala | His | Thr | Tyr | Leu | Glu | Lys | His | His | Gln |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Asn | Glu | Thr | Lys | Gln | Ser | His | Ser | Phe | Ser | Leu | Glu | Gly | Glu | Ala |







Asn His Tyr Ile Arg Ala Ile Gly Ser Met Leu Ile Leu Val Tyr Ser  
                   20                  25                  30  
 Met Leu Ile Ala Phe Leu Phe Ile Asp Lys Val Phe Val Asn Ile Ile  
           35                  40                  45  
 Phe Phe Gln Gly Met Phe Tyr Thr Gln Ile Phe Gly Ile Pro Val Phe  
       50                  55                  60  
 Leu Phe Leu Asn Leu Leu Ile Val Leu Leu Cys Ile Ile Val Gly Ser  
 65                  70                  75                  80  
 Val Leu Ala Tyr Lys Ile Asn Gln Gln Asn Asp Trp Ile Ile Ser Gln  
                   85                  90                  95  
 Ile Glu Arg Ser Ile Glu Gly Gln Thr Val Gly Ile Asn Asp Gln Asn  
                   100                  105                  110  
 Ile Glu Leu Tyr Thr Glu Thr Ile Asp Ile Tyr His Thr Leu Val Pro  
           115                  120                  125  
 Leu Asn Gln Glu Leu His Arg Leu Arg Met Lys Thr Gln Asn Leu Thr  
           130                  135                  140  
 Asn Glu Asn Tyr Asn Ile Asn Asp Val Lys Val Lys Lys Ile Ile Glu  
 145                  150                  155                  160  
 Asp Glu Arg Gln Arg Leu Ala Arg Glu Leu His Asp Ser Val Ser Gln  
                   165                  170                  175  
 Gln Leu Phe Ala Ala Ser Met Met Leu Ser Ala Ile Lys Glu Ser Lys  
           180                  185                  190  
 Leu Glu Pro Pro Leu Asn Gln Gln Ile Pro Ile Leu Glu Lys Met Val  
           195                  200                  205  
 Gln Asp Ser Gln Leu Glu Met Arg Ala Leu Leu Leu His Leu Arg Pro  
           210                  215                  220  
 Ile Gly Leu Lys Asp Lys Ser Leu Gly Glu Gly Ile Lys Asp Leu Val  
 225                  230                  235                  240  
 Ile Asp Leu Gln Lys Lys Val Pro Met Lys Val Val His Glu Ile Gln  
                   245                  250                  255  
 Asp Phe Glu Val Pro Lys Gly Ile Glu Asp His Leu Phe Arg Ile Thr  
           260                  265                  270  
 Gln Glu Ala Ile Ser Asn Thr Leu Arg His Ser Asn Gly Thr Lys Val  
           275                  280                  285  
 Thr Val Glu Leu Phe Asn Gln Glu Asp Tyr Leu Leu Leu Arg Ile Gln  
           290                  295                  300  
 Asp Asn Gly Lys Gly Phe Asn Val Asp Glu Lys Phe Glu Gln Ser Tyr  
 305                  310                  315                  320  
 Gly Leu Lys Asn Met Arg Glu Arg Ala Leu Glu Ile Gly Ala Thr Phe  
                   325                  330                  335  
 His Ile Val Ser Leu Pro Asp Ser Gly Thr Arg Ile Glu Val Lys Ala  
           340                  345                  350  
 Pro Leu Asn Lys Glu Glu Asn Ser Ser Gly Asp  
           355                  360

&lt;210&gt; 6204

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6204

Glu Ile Gly Glu Tyr Met Ile Ser Lys Gly Glu Gln Phe Pro Ser Phe  
 1                  5                  10                  15  
 Ser Leu Glu Asn Gln Asp Gly Asn Phe Ile Ser Asn Glu Thr Ile Lys  
           20                  25                  30  
 Gly Arg Lys Thr Ile Leu Tyr Phe Tyr Pro Arg Asp Asn Thr Pro Thr

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |     |
| Cys | Thr | Thr | Glu | Ala | Cys | Glu | Phe | Arg | Asp | His | Ile | Glu | Asp | Phe | Asn |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gln | Leu | Asp | Val | Asp | Ile | Tyr | Gly | Ile | Ser | Ala | Asp | Ser | Lys | Lys | Lys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| His | Gln | Asn | Phe | Ile | Lys | Lys | His | Gln | Leu | Asn | Phe | Asp | Leu | Leu | Val |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asp | Lys | Asp | Tyr | Gln | Leu | Ala | Asn | Lys | Val | Gly | Val | Tyr | Gln | Leu | Lys |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Lys | Ser | Phe | Gly | Lys | Glu | Asn | Met | Gly | Ile | Val | Arg | Thr | Thr | Phe | Ile |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Asp | Glu | Asn | Gly | Asn | Ile | Ile | Asp | Val | Ile | Glu | Lys | Val | Lys | Val |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Lys | Thr | Gln | Ile | Glu | Thr | Ile | Lys | Asn | Ile | Leu | Glu | Gly |     |     |     |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     |     |

&lt;210&gt; 6205

&lt;211&gt; 342

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6205

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Leu | Phe | Glu | Phe | Pro | Phe | Leu | Lys | Arg | Ser | Gln | Tyr | Asp | Met | Asn |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asp | Lys | Trp | Tyr | Arg | His | Ile | Ile | Gly | Ala | Arg | Thr | Ile | Lys | Thr | Gly |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Ala | Thr | Phe | Phe | Thr | Ser | Leu | Phe | Cys | Met | Leu | Leu | Asn | Leu | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Ile | Phe | Ala | Ile | Leu | Thr | Ala | Ile | Val | Thr | Ile | Glu | Pro | Thr | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Lys | Ala | Ser | Leu | Lys | Lys | Gly | Tyr | Lys | Arg | Leu | Pro | Ala | Thr | Val | Ile |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     | 80  |
| Gly | Ala | Leu | Phe | Ala | Val | Val | Phe | Thr | Tyr | Val | Phe | Gly | Asp | Gln | Ser |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Pro | Leu | Ser | Tyr | Ala | Leu | Ser | Ala | Thr | Phe | Thr | Ile | Leu | Ile | Cys | Thr |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Lys | Leu | Asn | Leu | Gln | Val | Gly | Thr | Thr | Val | Ala | Val | Leu | Thr | Ser | Val |
|     | 115 |     |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Ala | Met | Ile | Pro | Gly | Ile | His | Glu | Ala | Tyr | Val | Phe | Asn | Phe | Phe | Ser |
|     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |     |
| Arg | Leu | Leu | Thr | Ala | Leu | Ile | Gly | Leu | Val | Thr | Ala | Gly | Leu | Val | Asn |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Phe | Ile | Ile | Leu | Pro | Lys | Tyr | Tyr | His | Gln | Leu | Glu | Glu | Gln | Leu |     |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Ala | Leu | Ser | Glu | Lys | Lys | Met | Tyr | Arg | Leu | Phe | Tyr | Glu | Arg | Cys | Asn |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Glu | Leu | Leu | Gly | Lys | Phe | Ser | Ser | Glu | Lys | Thr | Ser | Lys | Glu | Leu |     |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |
| Ser | Lys | Leu | Asn | Ile | Ile | Ala | Gln | Lys | Val | Glu | Thr | Leu | Met | Ser | Tyr |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Gln | Arg | Asp | Glu | Leu | His | Tyr | His | Lys | Asn | Glu | Asp | Asn | Trp | Lys | Leu |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Leu | Asn | Arg | Leu | Thr | Asn | Arg | Ala | Tyr | Asn | Asn | Arg | Leu | Phe | Ile | Ser |
|     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |     |
| His | Leu | Ser | Asn | Ile | Ile | Tyr | Leu | Pro | Lys | His | Thr | Ser | Ile | Ala | Phe |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |

Asp Ala Asn Glu Lys Ile Ala Leu Ile Asn Ile Ser Asn Ser Ile Asn  
                   275                  280                  285  
 Gly Ile Ile Gln Lys Gly Ser Phe Ala Arg Gln Lys Lys Ser Ile Ala  
           290                  295                  300  
 Thr Leu Lys Ser Ser Val Lys Gln Met Asp Glu Phe Asp Gln Asn Gln  
 305                  310                  315                  320  
 Met Lys Ser Thr Leu Ile Tyr Glu Ile Leu Leu Ile Tyr Lys Ile Leu  
                   325                  330                  335  
 Asp Ser Arg Tyr Ala Lys  
                   340

<210> 6206

<211> 104

<212> PRT

<213> S.epidermidis

<400> 6206

Gly Leu Phe Glu Met Gln Ile Glu Lys Leu Arg Gly Gln Ser Leu Asp  
 1                  5                  10                  15  
 Glu Leu Phe Asp Ala Ile Leu Ala Leu Glu Asn Arg Glu Glu Cys Tyr  
                   20                  25                  30  
 Gln Phe Phe Asp Asp Leu Cys Thr Val Asn Glu Ile Gln Ser Leu Ser  
                   35                  40                  45  
 Gln Arg Leu Gln Val Ala Lys Met Ile Lys Gln Gly Tyr Thr Tyr Ala  
                   50                  55                  60  
 Thr Ile Glu Glu Glu Ser Gly Ala Ser Thr Ala Thr Ile Ser Arg Val  
 65                  70                  75                  80  
 Lys Arg Ser Leu Gln Trp Gly Asn Asp Ala Tyr Thr Met Ile Leu Asp  
                   85                  90                  95  
 Arg Leu Asn Ile Glu Thr Lys Ala  
                   100

<210> 6207

<211> 423

<212> PRT

<213> S.epidermidis

<400> 6207

Asp Ser Leu Asp Lys Ile Trp Arg Ile Asn Met Thr Asn Tyr His Asn  
 1                  5                  10                  15  
 Lys Leu Lys Gln Tyr Ala Glu Leu Leu Val Arg Val Gly Met Asn Val  
                   20                  25                  30  
 Gln Pro Gln Gln Pro Val Phe Ile Arg Ser Ser Val Glu Ala Leu Glu  
                   35                  40                  45  
 Leu Thr His Leu Ile Val Glu Glu Ala Tyr Lys Ala Gly Ala Glu Asp  
                   50                  55                  60  
 Val Arg Val Ser Tyr Thr Asp Pro Lys Leu Lys Arg Leu Lys Phe Glu  
 65                  70                  75                  80  
 Asn Glu Ser Val Glu His Phe Glu Lys Gln Glu Leu Lys Gln Tyr Asp  
                   85                  90                  95  
 Ile Glu Glu Arg Leu Asp Tyr Val Asn Arg Gly Ala Ala Asn Leu Ala  
                   100                  105                  110  
 Leu Ile Ala Glu Asp Pro Glu Leu Leu Asn Gly Ile Asp Ala Gln Lys  
                   115                  120                  125  
 Leu Lys Ala Tyr Gln Thr Val Tyr Ser Lys Gly Phe Lys Pro Tyr Met  
                   130                  135                  140

Glu Ala Ser Gln Lys Asn Gln Phe Pro Trp Val Val Ala Ala Phe Pro  
 145 150 155 160  
 Thr Arg Asp Trp Ala Arg Arg Val Tyr Pro Glu Leu Asp Val Glu Ser  
 165 170 175  
 Ala Tyr Ile Lys Phe Ile Asp Glu Val Phe Asp Ile Val Arg Val Asp  
 180 185 190  
 Gly Gln Asn Pro Ile Glu Asn Trp Glu Lys His Ile Lys Asp Leu Ser  
 195 200 205  
 Val His Ala Lys Arg Leu Gln Glu Lys Asn Tyr Gln Ala Leu His Tyr  
 210 215 220  
 Ile Ser Glu Gly Thr Asp Leu Ile Val Gly Leu Pro Lys Gly His Ile  
 225 230 235 240  
 Trp Glu Asp Ala Thr Ser Tyr Val Asn Gly Asp Gly Gln Pro Phe Ile  
 245 250 255  
 Ala Asn Ile Pro Thr Glu Glu Val Phe Thr Ala Pro Asp Arg Asn Asn  
 260 265 270  
 Val Asn Gly Tyr Val Thr Asn Lys Leu Pro Leu Asn Leu Asn Gly Asn  
 275 280 285  
 Ile Ile Asp Gly Phe Thr Leu Thr Phe Lys Asp Gly Val Ile Ile Asp  
 290 295 300  
 Val Lys Ala Glu Lys Gly Glu Lys Leu Leu Lys Asp Leu Ile Ala Thr  
 305 310 315 320  
 Asp Glu Gly Ala Cys Arg Leu Gly Glu Val Ala Leu Val Pro Asp Asp  
 325 330 335  
 Ser Pro Ile Ser Asn Arg Arg Thr Ile Phe Tyr Asn Thr Leu Phe Asp  
 340 345 350  
 Glu Asn Ala Ser Cys His Leu Ala Ile Gly Ser Ala Tyr Ser Phe Asn  
 355 360 365  
 Ile Lys Gly Gly Thr Glu Met Thr Thr Glu Glu Lys Ile Ala Asn Gly  
 370 375 380  
 Leu Asn Asp Ser Asn Ile His Glu Asp Phe Met Ile Gly Ser Pro Asp  
 385 390 395 400  
 Leu Thr Ile Tyr Gly Ile Leu Gln Asp Glu Thr Lys Glu Leu Val Phe  
 405 410 415  
 Lys Asn Gly Asn Trp Ala Lys  
 420

&lt;210&gt; 6208

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6208

Leu Arg Ile Glu Cys Pro Thr Thr Pro Thr Ser Lys Leu Val Gly Leu  
 1 5 10 15  
 Gly Ser Ser Arg Phe Ala Arg Arg Tyr Ser Gly Asn Arg Phe Phe Phe  
 20 25 30  
 Leu Phe Leu Arg Val Leu Arg Cys Phe Ser Ser Pro Gly Leu Pro Ser  
 35 40 45  
 Asp Met Leu  
 50

&lt;210&gt; 6209

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6209

Tyr Leu Ile Glu Cys Leu Arg Val Leu Glu Val Glu Thr Leu Thr Phe  
 1 5 10 15  
 Val Ser Phe Ile Phe Lys Val Tyr Thr Asn Ala Met Cys Gln Pro Leu  
 20 25 30  
 Phe Ile Phe Lys Leu Leu Gly Gly Lys Ala His Asp Lys Thr Ile Phe  
 35 40 45  
 Lys Val Cys Lys Thr Leu  
 50

&lt;210&gt; 6210

&lt;211&gt; 355

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6210

Met Leu Ile Asp Lys Ala Arg Ser Phe Ile Gln Thr Met Tyr Ser Glu  
 1 5 10 15  
 Leu Lys Tyr Asn Thr Asn Glu Val Glu Asn Arg Met Lys Glu Ile Glu  
 20 25 30  
 Gln Glu Ile Asn Leu Thr Gly Ser Tyr Thr His Thr Tyr Glu Glu Leu  
 35 40 45  
 Ser Tyr Gly Ala Lys Met Ala Trp Arg Asn Ser Asn Arg Cys Ile Gly  
 50 55 60  
 Arg Leu Phe Trp Gly Ser Leu Asn Val Lys Asp Ala Arg Asp Val Cys  
 65 70 75 80  
 Asp Glu Lys Glu Phe Ile Lys Phe Ile His Thr His Ile Lys Glu Ala  
 85 90 95  
 Thr Asn Gly Gly Lys Ile Lys Pro Tyr Ile Thr Ile Phe Ser Pro Glu  
 100 105 110  
 Asp Thr Pro Lys Ile Tyr Asn Asn Gln Leu Ile Arg Tyr Ala Gly Tyr  
 115 120 125  
 Glu Asn Val Gly Asp Pro Ser Glu Lys Lys Val Thr Arg Leu Ala Glu  
 130 135 140  
 His Leu Gly Trp Lys Gly Lys Gly Ser Asn Phe Asp Ile Leu Pro Leu  
 145 150 155 160  
 Ile Tyr Gln Leu Pro Asn Asp Thr Ile Lys Ile His Glu Leu Pro Ser  
 165 170 175  
 Asp Ile Val Lys Glu Val Ser Ile His His Glu His Tyr Pro Lys Leu  
 180 185 190  
 Ser Lys Leu Gly Leu Lys Trp Tyr Ala Val Pro Ile Ile Ser Asn Met  
 195 200 205  
 Asp Leu Lys Ile Gly Gly Ile Thr Tyr Pro Thr Ala Pro Phe Asn Gly  
 210 215 220  
 Trp Tyr Met Val Thr Glu Ile Ala Val Arg Asn Phe Thr Asp Thr Tyr  
 225 230 235 240  
 Arg Tyr Asn Leu Leu Glu Lys Val Ala Glu Ala Phe Glu Phe Asp Thr  
 245 250 255  
 Leu Lys Asn Asn Ser Phe Asn Lys Asp Arg Ala Leu Val Glu Leu Asn  
 260 265 270  
 His Ala Val Tyr His Ser Phe Lys Ala Asp Gly Val Ser Ile Val Asp  
 275 280 285  
 His Leu Thr Ala Ala Lys Gln Phe Glu Met Phe Glu Arg Asn Glu His  
 290 295 300  
 Gln Gln Asn Arg Asp Val Thr Gly Lys Trp Ser Trp Leu Ala Pro Pro

[illegible]

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<210> 6211
<211> 105
<212> PRT
<213> S.epidermidis
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|            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 6211 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Phe        | Val | Ile | Glu | Gln | Tyr | Phe | Leu | Arg | Asp | Gly | Lys | Phe | Val | Gln | Asp |
| 1          |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Val        | Asp | Met | Lys | Asp | Gly | Gly | Pro | Glu | Asp | Ser | Thr | Ile | Leu | Thr | Leu |
|            |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gln        | Lys | Asp | Asp | Phe | Asn | Lys | Ala | Leu | Asp | Ser | Leu | Ser | Glu | Asn | Phe |
|            |     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |
| Lys        | Val | Gln | Gln | Ser | Gln | Lys | Glu | Ser | Gly | Glu | Ile | Ile | Ile | Lys | Ala |
|            |     |     | 50  |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gln        | Asn | Asp | Tyr | Arg | Glu | Leu | Leu | Lys | Ser | Leu | Ser | Gln | Leu | Asp | Ile |
| 65         |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Tyr        | Pro | Lys | Tyr | Ile | Glu | Thr | Arg | Lys | Ser | Ser | Leu | Arg | Asp | Thr | Tyr |
|            |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Phe        | Asn | Ile | Asn | Gln | Arg | Gly | Asp | Lys |     |     |     |     |     |     |     |
|            |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     |     |     |

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<210> 6212
<211> 247
<212> PRT
<213> S.epidermidis
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|            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 6212 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Asn        | Glu | Gln | Asp | Lys | Lys | Asn | Phe | Tyr | Lys | Gln | Ile | Lys | Lys | Lys | Glu |
| 1          |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Val        | Cys | Ile | Met | Thr | Thr | Thr | Thr | Tyr | Gln | Gly | Thr | Ser | Gln | Asp | Val |
|            |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Trp        | Asn | Val | Leu | Phe | Asp | Asn | Arg | Lys | Tyr | Lys | Gly | Leu | Leu | Asp | Glu |
|            |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Val        | Asn | Lys | Leu | Ile | Glu | Asp | Thr | Lys | Arg | Leu | Tyr | Lys | Gln | Gly | Tyr |
|            | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg        | Leu | Glu | Ala | Ile | Asp | Glu | Gln | Gln | Lys | Pro | Lys | Val | Thr | Glu | Leu |
| 65         |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Glu        | Asn | Lys | Phe | Lys | Gln | Phe | Ala | Thr | Asp | Arg | Leu | Asn | Glu | Ile | Glu |
|            |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gln        | Arg | Cys | Asn | Glu | Ile | Glu | Lys | Glu | Ser | Gln | Gln | Asp | Asn | Val | Lys |
|            |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asp        | Pro | Gln | Thr | Glu | Ile | Ile | Lys | Arg | Gln | Asn | Leu | Glu | Ala | Arg | Leu |
|            |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ser        | Phe | Tyr | Asn | Asp | Asn | Glu | Ile | Val | Asp | Tyr | Ile | Asn | Ser | Lys | Asp |
|            | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Val        | Thr | Ser | Thr | Asp | Ile | Tyr | Glu | Leu | Ser | Leu | Leu | Gln | Gln | Lys | Tyr |
| 145        |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Asp        | Asn | Gln | Leu | Asn | Glu | Ser | Gln | Gln | Arg | Gln | Val | Ala | Phe | Lys | Leu |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Glu | Glu | Leu | Lys | Gln | Gly | Val | Leu | Tyr | Pro | Tyr | Thr | Thr | Asn | Glu | Glu |  |  |
|     |     |     | 180 |     |     |     |     |     | 185 |     |     |     | 190 |     |     |  |  |
| Tyr | Lys | Asn | Leu | Met | Phe | Glu | Tyr | Ser | Val | Ile | Asn | Gln | Thr | Gly | Met |  |  |
|     |     | 195 |     |     |     |     |     | 200 |     |     |     | 205 |     |     |     |  |  |
| Ala | Lys | Thr | Gly | Val | Val | Ile | Thr | Lys | Asn | Glu | Gln | Tyr | Gly | Gly | Val |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Glu | Ile | Lys | Gln | Leu | Thr | Glu | Arg | Tyr | Lys | Asn | Ala | Ile | Asn | Glu | Val |  |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |  |
| Lys | Gln | Ser | Asn | Asn | Arg | Arg |     |     |     |     |     |     |     |     |     |  |  |
|     |     |     |     | 245 |     |     |     |     |     |     |     |     |     |     |     |  |  |

&lt;210&gt; 6213

&lt;211&gt; 46

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6213

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Ile | Met | Lys | Asp | Ile | Phe | Asn | Glu | Met | Asp | Tyr | Arg | Asn | Ile | Pro | Arg |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |  |  |
| Asp | Met | Leu | Asp | Lys | Asn | Ile | Pro | Thr | Gly | Arg | Gly | Met | Val | Lys | Trp |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Ala | Pro | Phe | Val | Ile | Cys | Thr | Asn | Leu | Ile | Lys | Asn | Leu | Ile |     |     |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |

&lt;210&gt; 6214

&lt;211&gt; 326

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6214

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Ala | Phe | Met | Asp | Thr | Ala | Thr | His | Ile | Val | Met | Gly | Val | Gly | Leu | Thr |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Ala | Leu | Ala | Thr | Gln | Asp | Pro | Val | Met | Ala | Glu | Ser | Phe | Ala | Ala | Thr |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Ala | Thr | Thr | Leu | Ile | Ala | Gly | Ser | Leu | Ile | Pro | Asp | Gly | Asp | Thr | Val |  |  |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |  |  |
| Leu | Lys | Leu | Lys | Asp | Asn | Ala | Thr | Tyr | Ile | Ser | His | His | Arg | Gly | Ile |  |  |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |  |  |
| Thr | His | Ser | Leu | Pro | Phe | Thr | Ile | Leu | Trp | Pro | Ile | Leu | Ile | Thr | Phe |  |  |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |  |  |
| Phe | Ile | Phe | Val | Ile | Phe | Ser | Gln | Thr | Asn | Pro | Leu | His | Val | Trp | Leu |  |  |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |  |  |
| Trp | Ala | Gln | Leu | Ala | Val | Phe | Leu | His | Val | Phe | Val | Asp | Ile | Phe | Asn |  |  |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |  |  |
| Ser | Tyr | Gly | Thr | Gln | Ala | Leu | Arg | Pro | Ile | Thr | Asn | Lys | Trp | Ile | Gln |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Leu | Ser | Val | Ile | Asn | Thr | Phe | Asp | Pro | Ile | Ile | Phe | Ile | Ile | Leu | Ser |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Thr | Gly | Val | Leu | Leu | Trp | Ile | Leu | Gly | Ile | His | Pro | Tyr | Ile | Val | Phe |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Phe | Pro | Ile | Ile | Leu | Ile | Leu | Ile | Gly | Tyr | Tyr | Ile | Val | Arg | Phe | Lys |  |  |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |  |  |
| Met | Gln | Ala | Ala | Ile | Arg | Lys | Gln | Ala | Leu | Gln | Lys | Ile | Glu | Gln | Ser |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| His | Thr | Pro | Val | Lys | Val | Phe | Val | Ala | Pro | Thr | Ile | Lys | Phe | His | Val |  |  |



|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 195 |     | 200 |     | 205 |     |     |     |     |     |     |     |     |     |     |
| Trp | Arg | Val | Ala | Ile | Gln | Thr | Asp | Lys | His | Asp | Tyr | Val | Gly | Val | Ser |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Lys | Trp | Lys | Asn | Val | Asp | Phe | Thr | Asp | Lys | Val | Lys | Arg | Gln | Ser | Met |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Thr | Pro | Asp | Ser | Ile | Leu | Trp | Lys | Val | Lys | Gly | Asn | Lys | Asp | Ile | Tyr |
|     |     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |
| Thr | Phe | Leu | Asn | Phe | Ser | Ser | Ile | Tyr | Arg | Trp | Gln | Thr | Thr | Pro | Leu |
|     |     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |
| Asp | Asp | Gly | Thr | Thr | Glu | Ile | Arg | Leu | Met | Asp | Leu | Arg | Tyr | Leu | Asn |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Lys | Gly | Arg | Tyr | Ser | Phe | Val | Ala | Ile | Ala | His | Leu | Thr | Leu | Glu | Asn |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Glu | Ile | Asp | His | Ser | Tyr | Ile | Gly | Trp | Val | Phe | Ser | Glu | Asp | Lys | Leu |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Gln | Arg | Lys | Leu | Phe | Ser |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     | 325 |     |     |     |     |     |     |     |     |     |     |     |

<210> 6215  
 <211> 150  
 <212> PRT  
 <213> S.epidermidis

<400> 6215

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Ser | Ala | Glu | Leu | Glu | Ser | Ile | Asp | His | Glu | Leu | Glu | Glu | Ser | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Ser | Leu | Arg | Lys | Ala | Gly | Val | Arg | Ile | Thr | Pro | Gln | Arg | Gln | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Met | Arg | Tyr | Leu | Ile | Ser | Ser | His | Ser | His | Pro | Thr | Ala | Asp | Glu |
|     | 35  |     |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Ile | Tyr | Gln | Ala | Leu | Ser | Pro | Lys | Phe | Pro | Asn | Ile | Ser | Val | Ala | Thr |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| Ile | Tyr | Asn | Asn | Leu | Arg | Val | Phe | Lys | Asp | Ile | Gly | Ile | Val | Lys | Glu |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Leu | Thr | Tyr | Gly | Asp | Ser | Ser | Ser | Arg | Phe | Asp | Phe | Asn | Thr | His | Asn |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| His | Tyr | His | Ile | Ile | Cys | Glu | Lys | Cys | Gly | Lys | Ile | Val | Asp | Phe | His |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Tyr | Pro | Gln | Leu | Asp | Glu | Val | Glu | Gln | Leu | Ala | Gln | His | Val | Thr | Asp |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Phe | Asp | Val | Thr | His | His | Arg | Met | Glu | Ile | Tyr | Gly | Val | Cys | Lys | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Cys | Lys | Glu | Glu | Gly | Asn |     |     |     |     |     |     |     |     |     |     |
| 145 |     |     |     |     | 150 |     |     |     |     |     |     |     |     |     |     |

<210> 6216  
 <211> 258  
 <212> PRT  
 <213> S.epidermidis

<400> 6216

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Ile | Lys | Glu | Arg | Asp | Lys | Met | Ile | Val | Lys | Thr | Asp | Glu | Glu | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gln | Ala | Leu | Lys | Glu | Ile | Gly | Tyr | Ile | Cys | Ala | Lys | Val | Arg | Asp | Thr |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Met | Lys | Glu | Ala | Thr | Lys | Pro | Gly | Val | Thr | Thr | Arg | Glu | Leu | Asp | His |

35 40 45  
 Ile Ala Lys Asp Leu Phe Glu Glu His Gly Ala Ile Ser Ala Pro Ile  
 50 55 60  
 His Asp Glu Asn Phe Pro Gly Gln Thr Cys Ile Ser Val Asn Glu Glu  
 65 70 75 80  
 Val Ala His Gly Ile Pro Gly Lys Arg Val Ile His Glu Gly Asp Leu  
 85 90 95  
 Val Asn Ile Asp Val Ser Ala Leu Lys Asn Gly Tyr Tyr Ala Asp Thr  
 100 105 110  
 Gly Ile Ser Phe Val Val Gly Lys Ser Asp Gln Pro Leu Lys Gln Lys  
 115 120 125  
 Val Cys Asp Val Ala Thr Met Ala Phe Glu Asn Ala Met Lys Lys Val  
 130 135 140  
 Lys Pro Gly Thr Lys Leu Ser Asn Ile Gly Lys Ala Val His Ala Thr  
 145 150 155 160  
 Ala Arg Gln Asn Asp Leu Thr Val Ile Lys Asn Leu Thr Gly His Gly  
 165 170 175  
 Val Gly Gln Ser Leu His Glu Ala Pro Asn His Val Met Asn Tyr Phe  
 180 185 190  
 Asp Pro Lys Asp Lys Thr Leu Leu Lys Glu Gly Gln Val Ile Ala Val  
 195 200 205  
 Glu Pro Phe Ile Ser Thr His Ala Thr Phe Val Thr Glu Gly Lys Asn  
 210 215 220  
 Glu Trp Ala Phe Glu Thr Lys Asp Lys Ser Tyr Val Ala Gln Ile Glu  
 225 230 235 240  
 His Thr Val Ile Val Thr Lys Asp Gly Pro Leu Leu Thr Thr Lys Ile  
 245 250 255  
 Asp Asp

<210> 6217  
 <211> 398  
 <212> PRT  
 <213> S.epidermidis

<400> 6217  
 Lys Ala Lys Glu Ile Val Met Ser Lys Lys Glu Lys Thr Thr Ser Lys  
 1 5 10 15  
 Tyr Leu Asn Ser Ile Glu Asp Lys Glu His Lys Lys Asn Lys Lys Ile  
 20 25 30  
 Glu Val Asp Arg Thr Tyr Ile Glu Pro Gln Glu Phe Gln Ser Lys Lys  
 35 40 45  
 Pro Lys Lys Lys Asn Gln Val Phe Phe Val Ser Arg Leu Asn Lys Pro  
 50 55 60  
 Ala Lys Tyr Thr Glu Asn Ser Asn Phe Phe Ser Tyr Leu Ile Tyr Arg  
 65 70 75 80  
 Ile Gly Lys Asp Asp Ala Ala Gly Leu Ala Ala Gln Met Thr Tyr His  
 85 90 95  
 Phe Val Leu Ala Leu Phe Pro Met Leu Ile Phe Leu Leu Thr Leu Leu  
 100 105 110  
 Gly Gln Phe Ile Thr Ile Asp Ala Asn Gln Ile Asn Gln Lys Val Ser  
 115 120 125  
 Gln Tyr Val Pro Asp Gln Glu Thr Ala Ser Ile Val Gly Gly Ile Val  
 130 135 140  
 Lys Asp Ile Ser Asp Thr Ala Ser Gly Gly Ile Leu Ser Val Gly Leu  
 145 150 155 160

6217 = 6217

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Ile Leu Ala Ile Trp Ser Ala Ser Asn Gly Met Ser Ala Ile Ile Asn
      165      170      175
Ser Phe Asn Val Ala Tyr Asp Val Glu Asp Ser Arg Asn Gly Val Val
      180      185      190
Val Lys Leu Leu Ser Ile Leu Tyr Thr Leu Val Leu Ser Ala Val Phe
      195      200      205
Val Val Ala Val Val Leu Ile Thr Leu Gly Pro Val Ile Asn Lys Phe
      210      215      220
Leu Phe Gly Pro Leu Gly Ile Asp Asn Gln Ile Glu Trp Ile Phe Asn
      225      230      235      240
Leu Val Arg Ile Val Ile Pro Leu Ile Ile Phe Ile Ile Phe Thr
      245      250      255
Val Leu Tyr Ser Val Ala Pro Asn Val Lys Thr Lys Leu Arg Ser Val
      260      265      270
Ile Pro Gly Ala Ile Phe Thr Ser Ile Ile Trp Leu Leu Gly Ser Phe
      275      280      285
Ala Phe Gly Tyr Tyr Ile Ser Asn Phe Ser Asn Tyr Ser Lys Thr Tyr
      290      295      300
Gly Ser Leu Ala Gly Ile Ile Ile Leu Phe Leu Trp Leu Tyr Ile Thr
      305      310      315      320
Ser Phe Ile Ile Ile Ile Gly Ala Glu Ile Asn Ala Ile Ile His Gln
      325      330      335
Arg Lys Val Ile Ala Gly His Thr Pro Glu Glu Ala Ala Ile Lys His
      340      345      350
Asp Asp Asn Asn Glu Asn His Tyr Asn Glu Asn Thr Thr Tyr Glu Tyr
      355      360      365
Tyr Glu Asp Ser Lys Asp Val Asp Ile Ser Asn Glu Asp Asp Thr Tyr
      370      375      380
Asn Ile Asn His Gln Ser Lys Glu Glu His His Thr Ser Asp
      385      390      395

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&lt;210&gt; 6218

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6218

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Ala His Gly Phe Lys Phe Ser Phe Thr Pro Leu Pro Gly Tyr Phe Ser
1      5      10      15
Pro Phe Pro His Gly Thr Gly Ser Leu Ser Val Thr Arg Glu Tyr Leu
      20      25      30
Ala Leu Gly Asp Gly Pro Pro Arg Phe Arg Arg Asn Phe Thr Cys Ser
      35      40      45
Val Val Leu Arg Ile His Ser Arg Glu Asn Met Phe Pro Thr Thr Gly
      50      55      60
Leu Leu Pro Ser Leu Ile His Leu Ser Arg
      65      70

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&lt;210&gt; 6219

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6219

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Lys Thr Phe Cys Asp Ala Lys Ser Tyr Leu Leu Ser Ser Phe Glu Cys
1      5      10      15

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Ile Ile Ile His Leu Ser Gly Asp Asn Gly Lys Glu Val Thr Pro Val  
                   20                  25                  30  
 Pro Met Pro Asn Thr Glu Val Lys Leu Leu Ser Ala Asp Gly Ser Arg  
                   35                  40                  45  
 Thr Asp Val Thr Leu Glu  
                   50

<210> 6220  
 <211> 56  
 <212> PRT  
 <213> S.epidermidis

<400> 6220  
 Ile Ile Asp Cys Ala Lys Thr Val Ala Val Val Val Pro Ser Pro Ala  
 1                  5                  10                  15  
 Ile Ser Phe Val Leu Phe Ala Thr Ser Cys Thr Asn Phe Ala Pro Ile  
                   20                  25                  30  
 Phe Ser Tyr Gly Ser Ser Asn Ser Ile Ser Leu Ala Ile Val Thr Pro  
                   35                  40                  45  
 Ser Leu Val Ile Lys Gly Val Val  
                   50                  55

<210> 6221  
 <211> 207  
 <212> PRT  
 <213> S.epidermidis

<400> 6221  
 Gly Gly Arg Leu Met Asn Ala Ile Glu Leu Lys Asp Val Asn Tyr Arg  
 1                  5                  10                  15  
 Ser Asn Ala Phe Gln Leu Gln Asp Val Ser Phe Asn Val Pro Lys Gly  
                   20                  25                  30  
 Tyr Val Thr Gly Phe Ile Gly Gly Asn Gly Ala Gly Lys Thr Thr Ile  
                   35                  40                  45  
 Ile Arg Leu Ile Met Asp Leu Ile Gln Ser Glu Ser Gly Thr Ile Ser  
                   50                  55                  60  
 Val Phe Glu Lys Asp Ile Lys Ile His Pro Arg Glu Ile Lys Asn Lys  
 65                  70                  75                  80  
 Ile Gly Phe Val Tyr Ser Glu Ile Tyr Phe Asn Gln Lys Trp Thr Val  
                   85                  90                  95  
 Lys Lys Leu Glu Asn Ile Ile Ala Pro Phe Tyr Asp Arg Trp Asp His  
                   100                  105                  110  
 Glu Ile Phe Ile Lys Tyr Leu Lys Phe Phe Gln Leu Pro Tyr Lys Asn  
                   115                  120                  125  
 Lys Ile Lys Thr Phe Ser Thr Gly Met Lys Met Lys Leu Ser Leu Ala  
                   130                  135                  140  
 Ile Ala Phe Ser His His Ala Glu Leu Phe Ile Leu Asp Glu Pro Thr  
 145                  150                  155                  160  
 Ser Gly Leu Asp Pro Leu Ile Arg Asn Glu Leu Leu Glu Ile Ile Gln  
                   165                  170                  175  
 Gln Glu Leu Ile Asp Glu Asn Lys Thr Val Phe Phe Ser Thr His Ile  
                   180                  185                  190  
 Ile Ser Asp Leu Glu Lys Ile Ala Asp Tyr Ile Val Phe Ser Gln  
                   195                  200                  205

<210> 6222

<211> 359  
 <212> PRT  
 <213> S.epidermidis

<400> 6222

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Phe | Lys | Trp | Arg | Phe | Asn | Met | Ser | His | Ser | Gln | Ile | Asn | Gly | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Phe | Phe | Asn | Asn | Ile | Leu | Asn | Ala | Val | Gly | Ala | Gly | Val | Val | Ile |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Leu | Leu | Pro | Asn | Ala | Leu | Leu | Gly | Glu | Leu | Leu | Lys | Phe | Phe | Lys |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu | Gly | Asn | His | Val | Leu | Glu | Thr | Ile | Phe | Gln | Leu | Val | Thr | Ile | Ile |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gln | Ser | Phe | Met | Ala | Phe | Ile | Ile | Gly | Val | Leu | Ala | Ala | His | Gln | Phe |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Lys | Phe | Lys | Gly | Thr | Gly | Ala | Ala | Ile | Ile | Gly | Ile | Ser | Ala | Met | Leu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gly | Ser | Gly | Ala | Val | His | Tyr | Asn | Gly | Gln | Thr | Ile | Glu | Leu | Lys | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile | Gly | Asp | Ile | Ile | Asn | Val | Ile | Leu | Val | Val | Ile | Leu | Ala | Cys | Phe |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ile | Tyr | Met | Phe | Leu | Glu | Gly | Lys | Leu | Gly | Ser | Leu | Glu | Met | Ile | Ile |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Pro | Val | Leu | Val | Pro | Val | Ile | Ser | Gly | Leu | Ile | Gly | Leu | Leu | Thr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Leu | Pro | Tyr | Val | Gln | Val | Ile | Thr | Gln | Ser | Leu | Gly | Lys | Leu | Val | Asn |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Arg | Phe | Thr | Glu | Leu | Asn | Pro | Leu | Leu | Met | Ser | Ile | Leu | Ile | Cys | Val |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Thr | Phe | Ser | Leu | Leu | Met | Val | Thr | Pro | Ile | Ser | Leu | Val | Ala | Ile | Ala |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Thr | Ala | Ile | Asn | Leu | Thr | Gly | Leu | Gly | Ser | Gly | Ala | Ala | Asn | Met | Gly |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ile | Val | Ala | Ala | Cys | Val | Thr | Phe | Leu | Phe | Gly | Ser | Leu | Arg | Val | Asn |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ser | Leu | Gly | Val | Asn | Val | Val | Leu | Leu | Ile | Gly | Ala | Ala | Lys | Met | Met |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Ile | Pro | Val | Tyr | Leu | Lys | His | Leu | Ile | Ile | Ala | Ile | Pro | Leu | Thr | Ile |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Asn | Gly | Val | Ile | Cys | Gly | Ile | Ile | Ala | Tyr | Ile | Leu | Lys | Ile | Lys | Gly |
|     | 275 |     |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Thr | Ala | Leu | Ser | Ala | Gly | Phe | Gly | Tyr | Thr | Gly | Leu | Val | Gly | Pro | Ile |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Asn | Ala | Leu | Asn | Arg | Met | Ser | Gly | Asn | Pro | Ser | Met | Asn | Ile | Ile | Leu |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Leu | Ile | Ile | Gly | Tyr | Phe | Val | Ile | Pro | Phe | Ala | Gly | Ala | Phe | Ile | Val |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| His | Lys | Ile | Cys | Lys | Lys | Val | Leu | Ser | Thr | Tyr | Ser | Asp | Glu | Ile | Tyr |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Lys | Phe | Glu | Ile | Ser | Lys | Asp |     |     |     |     |     |     |     |     |     |
|     |     | 355 |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6223  
 <211> 58  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6223

Lys Leu Met Trp Asn Phe Ile Lys Gly Leu Phe Lys Phe Val Phe Ser  
 1 5 10 15  
 Leu Leu Ala Ile Thr Thr Val Val Val Gly Ile Gly Val Val Ala Phe  
 20 25 30  
 Ala Tyr Ile Phe Lys Lys Asp Phe Glu Asp Ile Glu Arg Lys Thr Lys  
 35 40 45  
 Glu Ile Val Ser Asp Ile Glu Asn Asn Asn  
 50 55

&lt;210&gt; 6224

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6224

Gly Gly Glu Cys Ser Tyr Leu Ile Asn Asn His Cys Arg Lys Ile Thr  
 1 5 10 15  
 Asp Thr Gln Leu Arg Asp Asn Gly Asp Arg Asn Gln Lys Ser Lys Thr  
 20 25 30  
 Asn Val Leu Ser Ile Asn Leu Phe Val Leu Ala Phe Val Leu Lys Ser  
 35 40 45  
 His Lys Lys Lys Thr Ile Asn Tyr  
 50 55

&lt;210&gt; 6225

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6225

Ile Lys Leu Arg Tyr Gln Met Leu Met Ile Leu Ile Tyr Ser Val Ser  
 1 5 10 15  
 Ile Ile Asp Lys Ile Tyr Thr Ile Arg Tyr Leu Ile Tyr Asn Ile Ser  
 20 25 30  
 Cys Ile Leu Ile Phe His Asn Leu Ile Ser Pro Asn Asn Thr Lys Asp  
 35 40 45  
 Phe Leu Leu Leu Ser Thr Leu Lys  
 50 55

&lt;210&gt; 6226

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6226

Met Ile Leu Leu Tyr Leu Leu Ala Phe Lys Thr Pro Gln Ser Ser Leu  
 1 5 10 15  
 Tyr Val Ser Ile Tyr Cys Phe Leu Asn Asn Ile Gly Asn Cys His Lys  
 20 25 30  
 Phe Val Asp Thr Ile Leu Glu Phe Ile Lys Lys  
 35 40

&lt;210&gt; 6227

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6227

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Arg | Ile | Arg | Ile | Lys | Phe | Asn | Gly | Gln | Ser | Ile | Thr | Lys | Gly | Ile |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Tyr | Leu | Gln | Phe | Asp | Val | Ile | Asp | Asp | Phe | Asp | Ser | Phe | Phe | Lys | Pro |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Ser | Ile | Asn | Leu | Asn | Glu | Lys | Asn |     |     |     |     |     |     |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |

&lt;210&gt; 6228

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6228

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Phe | Gly | Arg | Arg | Phe | Glu | Ser | Cys | Lys | Val | His | Ile | Ile | Leu | Glu |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Glu | Tyr | Pro | Ser | Pro | Ala | Glu | Gly | Ile | Gly | Leu | Glu | Asn | Arg | Gln | Glu |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Leu | Asn | Gly | Ser | Arg | Gly | Phe | Glu | Ser | Leu | Phe | Leu | Arg | Phe | Asn | Gly |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Val | Val |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     | 50  |     |     |     |     |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 6229

&lt;211&gt; 491

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6229

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ile | Leu | Arg | Leu | Ile | Ser | Asn | Lys | Ile | Ile | Thr | Thr | Ser | Asn | Leu |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Arg | Leu | Gly | Met | Pro | His | Ile | Ile | Phe | Leu | Thr | Phe | Leu | Tyr | Val | Gly |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Gly | Lys | Lys | Leu | Glu | Thr | Ile | Lys | Lys | Asn | Glu | Val | Lys | Thr | Gly | Lys |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | Ile | Asp | Leu | Thr | His | Glu | Gly | His | Gly | Val | Val | Lys | Val | Asp | Arg |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Tyr | Pro | Ile | Phe | Ile | Pro | Asn | Ala | Leu | Ile | Asp | Glu | Glu | Ile | Lys | Phe |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Lys | Leu | Ile | Lys | Val | Lys | Lys | Asn | Phe | Ala | Ile | Gly | Lys | Leu | Ile | Glu |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Val | Ile | Ser | Glu | Ser | Asp | Asp | Arg | Val | Thr | Pro | Pro | Cys | Ile | Tyr | Tyr |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Ala | Lys | Cys | Gly | Gly | Cys | Gln | Leu | Gln | His | Met | Thr | Tyr | Arg | Ala | Gln |
|     |     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |
| Leu | Asp | Met | Lys | Arg | Glu | Gln | Val | Val | Asn | Leu | Phe | His | Arg | Lys | Gly |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Pro | Phe | Glu | Asn | Thr | Val | Ile | Lys | Glu | Thr | Ile | Gly | Met | Val | Asn | Pro |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Trp | Arg | Tyr | Arg | Asn | Lys | Ser | Gln | Ile | Pro | Val | Gly | Gln | Ser | Asn | Ser |
|     |     |     | 165 |     |     |     | 170 |     |     |     |     |     |     | 175 |     |
| Asn | Gln | Val | Ile | Met | Gly | Phe | Tyr | Arg | Gln | Arg | Ser | His | Asp | Ile | Ile |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |

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Asp Met Asp Ser Cys Leu Ile Gln Asp Arg Gln His Gln Glu Val Met
    195                200                205
Asn Arg Val Lys Tyr Trp Leu Asn Glu Leu Asn Ile Ser Ile Tyr Asn
    210                215                220
Glu Lys Thr Lys Thr Gly Leu Ile Arg His Leu Val Val Arg Thr Gly
    225                230                235                240
Tyr His Thr Asp Glu Met Met Val Ile Phe Val Thr Asn Gly Ala Thr
                245                250                255
Phe Lys Gln Ser Glu Leu Leu Val Asn Lys Leu Lys Lys Glu Phe Pro
                260                265                270
Asn Ile Thr Ser Ile Lys Gln Asn Ile Asn Asn Ser His Ser Asn Val
                275                280                285
Ile Met Gly Arg Gln Ser Met Thr Leu Tyr Gly Lys Asp Lys Ile Glu
    290                295                300
Asp Gln Leu Ser Glu Val Thr Tyr His Ile Ser Asp Leu Ser Phe Tyr
    305                310                315                320
Gln Ile Asn Ser Ser Gln Thr Glu Lys Leu Tyr Gln Gln Ala Leu Asn
                325                330                335
Tyr Ala Gln Leu Thr Gly Lys Glu Ile Val Leu Asp Thr Tyr Cys Gly
                340                345                350
Ile Gly Thr Ile Gly Leu Tyr Met Ala Pro Leu Ala Lys His Val Tyr
                355                360                365
Gly Val Glu Val Val Pro Gln Ala Ile Lys Asp Ala Glu Asp Asn Ala
    370                375                380
Thr Lys Asn Gln Leu Lys Asn Thr Thr Phe Glu Cys Gly Lys Ala Glu
    385                390                395                400
Asp Val Ile Leu Thr Trp Lys Ser Gln Gly Ile Lys Pro Gly Val Val
                405                410                415
Met Val Asp Pro Pro Arg Lys Gly Cys Asp Glu Thr Phe Leu Thr Thr
                420                425                430
Leu Leu Lys Leu Asn Pro Lys Arg Ile Val Tyr Ile Ser Cys Asn Pro
                435                440                445
Ser Thr Gln Gln Arg Asp Ala Gln Ile Leu Ala Glu Gln Tyr Glu Leu
                450                455                460
Val Glu Ile Thr Pro Val Asp Met Phe Pro Gln Thr Thr His Ile Glu
    465                470                475                480
Thr Val Ala Leu Phe Val Arg Lys Asp Glu Glu
                485                490

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&lt;210&gt; 6230

&lt;211&gt; 729

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6230

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Met Asn Ala Leu Val Lys Asn Met Asn Ser Glu Gln Ser Glu Ala Val
1          5          10          15
Arg Thr Thr Glu Gly Pro Leu Leu Ile Met Ala Gly Ala Gly Ser Gly
    20          25          30
Lys Thr Arg Val Leu Thr His Arg Ile Ala Tyr Leu Leu Asp Glu Lys
    35          40          45
Asp Val Ser Pro Tyr Asn Ile Leu Ala Ile Thr Phe Thr Asn Lys Ala
    50          55          60
Ala Lys Glu Met Lys Ala Arg Val Glu His Leu Val Gly Glu Glu Ala
    65          70          75          80
Gln Val Ile Trp Met Ser Thr Phe His Ser Met Cys Val Arg Ile Leu

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|            |            |            |            |            |            |            |            |            |     |            |            |            |            |     |            |  |  |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|-----|------------|------------|------------|------------|-----|------------|--|--|
|            |            |            | 85         |            |            |            |            | 90         |     |            |            |            | 95         |     |            |  |  |
| Arg        | Arg        | Asp        | Ala<br>100 | Asp        | Arg        | Ile        | Gly        | Ile<br>105 | Glu | Arg        | Asn        | Phe        | Thr<br>110 | Ile | Ile        |  |  |
| Asp        | Pro        | Thr<br>115 | Asp        | Gln        | Lys        | Ser        | Val<br>120 | Ile        | Lys | Asp        | Val        | Leu<br>125 | Lys        | Ser | Glu        |  |  |
| Asn        | Ile<br>130 | Asp        | Ser        | Lys        | Arg        | Phe<br>135 | Glu        | Pro        | Arg | Met        | Phe<br>140 | Ile        | Gly        | Ala | Ile        |  |  |
| Ser<br>145 | Asn        | Leu        | Lys        | Asn        | Glu<br>150 | Leu        | Lys        | Thr        | Pro | Glu<br>155 | Asp        | Ala        | Gln        | Lys | Glu<br>160 |  |  |
| Ala        | Asn        | Asp        | Phe<br>165 | His        | Ser        | Gln        | Met        | Val<br>170 | Ala | Thr        | Val        | Tyr        | Lys<br>175 | Gly | Tyr        |  |  |
| Gln        | Arg        | Gln        | Leu<br>180 | Ser        | Arg        | Asn        | Glu<br>185 | Ala        | Leu | Asp        | Phe        | Asp<br>190 | Asp        | Leu | Ile        |  |  |
| Met        | Thr        | Thr<br>195 | Ile        | Asn        | Leu        | Phe<br>200 | Glu        | Arg        | Val | Pro        | Glu<br>205 | Thr        | Leu        | Glu | Tyr        |  |  |
| Tyr        | Gln<br>210 | Asn        | Lys        | Phe        | Gln<br>215 | Tyr        | Ile        | His        | Val | Asp<br>220 | Glu        | Tyr        | Gln        | Asp | Thr        |  |  |
| Asn<br>225 | Lys        | Ala        | Gln        | Tyr<br>230 | Thr        | Leu        | Val        | Lys        | Leu | Leu<br>235 | Ala        | Asn        | Lys        | Phe | Lys<br>240 |  |  |
| Asn        | Leu        | Cys        | Val<br>245 | Val        | Gly        | Asp        | Ser        | Asp<br>250 | Gln | Ser        | Ile        | Tyr        | Gly<br>255 | Trp | Arg        |  |  |
| Gly        | Ala        | Asp        | Ile<br>260 | Gln        | Asn        | Ile        | Leu        | Ser<br>265 | Phe | Glu        | Glu        | Asp<br>270 | Tyr        | Pro | Glu        |  |  |
| Ala        | Lys        | Thr<br>275 | Ile        | Phe        | Leu        | Glu<br>280 | Gln        | Asn        | Tyr | Arg        | Ser<br>285 | Thr        | Lys        | Asn | Ile        |  |  |
| Leu        | Asn<br>290 | Ala        | Ala        | Asn        | Glu<br>295 | Val        | Ile        | Lys        | His | Asn<br>300 | Ser        | Glu        | Arg        | Lys | Pro        |  |  |
| Lys<br>305 | Gly        | Leu        | Trp        | Thr<br>310 | Ala        | Asn        | Ser        | Gly        | Gly | Asp<br>315 | Lys        | Ile        | Gln        | Tyr | Tyr<br>320 |  |  |
| Glu        | Ala        | Met        | Thr<br>325 | Glu        | Arg        | Asp        | Glu        | Ala<br>330 | Glu | Tyr        | Val        | Val<br>335 | Lys        | Glu | Ile        |  |  |
| Met        | Lys        | His<br>340 | Gln        | Arg        | Ser        | Gly<br>345 | Lys        | Lys        | Tyr | Ser        | Glu<br>350 | Met        | Ala        | Ile | Leu        |  |  |
| Tyr        | Arg        | Thr<br>355 | Asn        | Ala        | Gln        | Ser<br>360 | Arg        | Val        | Leu | Glu        | Glu<br>365 | Thr        | Phe        | Met | Lys        |  |  |
| Ser        | Asn<br>370 | Ile        | Pro        | Tyr        | Thr<br>375 | Met        | Val        | Gly        | Gly | Gln<br>380 | Lys        | Phe        | Tyr        | Asp | Arg        |  |  |
| Lys<br>385 | Glu        | Ile        | Lys        | Asp<br>390 | Leu        | Leu        | Ser        | Tyr        | Leu | Arg<br>395 | Val        | Ile        | Ala        | Asn | Ser<br>400 |  |  |
| Asn        | Asp        | Asp        | Ile<br>405 | Ser        | Leu        | Gln        | Arg        | Ile<br>410 | Ile | Asn        | Val        | Pro        | Lys<br>415 | Arg | Gly        |  |  |
| Ile        | Gly        | Pro<br>420 | Ser        | Ser        | Val        | Glu<br>425 | Lys        | Ile        | Gln | Thr<br>430 | Tyr        | Ala        | Leu        | Gln | Asn        |  |  |
| Asn        | Ile<br>435 | Ser        | Met        | Phe        | Asp        | Ala<br>440 | Leu        | Ala        | Glu | Val<br>445 | Asp        | Phe        | Ile        | Gly | Leu        |  |  |
| Ser        | Lys<br>450 | Lys        | Val        | Thr        | Gln<br>455 | Glu        | Cys        | Ile        | Ser | Phe<br>460 | Tyr        | Glu        | Met        | Ile | Gln        |  |  |
| Asn<br>465 | Leu        | Ile        | Lys        | Glu<br>470 | Gln        | Glu        | Phe        | Leu        | Glu | Ile<br>475 | Ser        | Glu        | Ile        | Val | Asp<br>480 |  |  |
| Glu        | Val        | Leu        | Gln<br>485 | Lys        | Ser        | Gly        | Tyr        | Arg<br>490 | Asp | Met        | Leu        | Asp<br>495 | Arg        | Glu | Gln        |  |  |
| Ser        | Ile        | Glu<br>500 | Ser        | Arg        | Ser        | Arg        | Leu<br>505 | Glu        | Asn | Leu        | Asp<br>510 | Glu        | Phe        | Met | Ser        |  |  |
| Val        | Pro<br>515 | Lys        | Asp        | Tyr        | Glu<br>520 | Glu        | Asn<br>525 | Thr        | Pro | Leu        | Glu<br>530 | Glu        | Gln        | Ser | Leu        |  |  |
| Ile        | Asn        | Phe        | Leu        | Thr        | Asp        | Leu        | Ser        | Leu        | Val | Ala        | Asp        | Ile        | Asp        | Glu | Ala        |  |  |

530                      535                      540  
 Asp Thr Gln Asn Gly Val Thr Leu Met Thr Met His Ser Ala Lys Gly  
 545                      550                      555                      560  
 Leu Glu Phe Pro Ile Val Phe Ile Met Gly Met Glu Glu Ser Leu Phe  
                          565                      570                      575  
 Pro His Ile Arg Ala Ile Lys Ser Glu Asp Asp His Glu Met Glu Glu  
                          580                      585                      590  
 Glu Arg Arg Ile Cys Tyr Val Ala Ile Thr Arg Ala Glu Glu Leu Leu  
                          595                      600                      605  
 Tyr Ile Thr Asn Ala Thr Thr Arg Met Leu Phe Gly Arg Ser Gln Ser  
 610                      615                      620  
 Asn Met Pro Ser Arg Phe Leu Lys Glu Ile Pro Glu Asp Leu Leu Asp  
 625                      630                      635                      640  
 Ser His Thr Gly Gln Lys Arg Gln Thr Ile Tyr Pro Lys Ser Gln Pro  
                          645                      650                      655  
 Lys Arg Gly Phe Ser Lys Arg Thr Thr Ser Thr Lys Lys Gln Val Ser  
                          660                      665                      670  
 Ser Ser Asp Trp Lys Val Gly Asp Lys Val Met His Lys Ala Trp Gly  
                          675                      680                      685  
 Glu Gly Met Val Ser Asn Val Asn Glu Lys Asn Gly Ser Val Glu Leu  
 690                      695                      700  
 Asp Ile Ile Phe Lys Ser Glu Gly Pro Lys Arg Leu Leu Ala Gln Phe  
 705                      710                      715                      720  
 Ala Pro Ile Thr Lys Lys Glu Asp Ser  
                          725

<210> 6231  
 <211> 65  
 <212> PRT  
 <213> S.epidermidis

<400> 6231  
 Asn Leu Glu Arg Lys Ile Gly Phe Thr Pro Ile Ser His Ser Gly Lys  
 1                      5                      10                      15  
 Glu Cys Val Leu Arg Val Glu Leu Leu Pro His Asn Asn Leu Glu Ala  
                          20                      25                      30  
 Ala Thr Gly Phe Glu Pro Val Ile Lys Val Leu Gln Thr Ser Ala Leu  
                          35                      40                      45  
 Pro Leu Gly Tyr Ala Ala Asn Asn Trp Ala Ser Trp Ile Arg Thr Ser  
 50                      55                      60  
 Ala  
 65

<210> 6232  
 <211> 311  
 <212> PRT  
 <213> S.epidermidis

<400> 6232  
 Ser His Ile Leu Ser Val Tyr Ile Tyr Asn Leu Ile Val Thr Thr Val  
 1                      5                      10                      15  
 Ile Lys Lys Ile Asn Phe Ile Ile Phe Gly Gly Tyr His Met Lys Lys  
                          20                      25                      30  
 Arg Phe Leu Ser Ile Cys Thr Met Thr Ile Ala Ala Leu Ala Thr Thr  
                          35                      40                      45  
 Thr Met Val Asn Thr Ser Tyr Ala Lys Thr Asp Thr Glu Ser His Asn

|                         |                     |                     |     |    |
|-------------------------|---------------------|---------------------|-----|----|
| 50                      |                     | 55                  |     | 60 |
| His Ser Ser Leu Gly Thr | Glu Asn Lys Asn Val | Leu Asp Ile Asn Ser |     |    |
| 65                      | 70                  | 75                  | 80  |    |
| Ser Ser His Asn Ile Lys | Pro Ser Gln Asn Lys | Ser Tyr Pro Ser Val |     |    |
|                         | 85                  | 90                  | 95  |    |
| Ile Leu Pro Asn Asn Asn | Arg His Gln Ile Phe | Asn Thr Thr Gln Gly |     |    |
|                         | 100                 | 105                 | 110 |    |
| His Tyr Asp Ala Val Ser | Phe Ile Tyr Ile Pro | Ile Asp Gly Gly Tyr |     |    |
|                         | 115                 | 120                 | 125 |    |
| Met Ser Gly Ser Gly Val | Val Val Gly Glu Asn | Glu Ile Leu Thr Asn |     |    |
|                         | 130                 | 135                 | 140 |    |
| Lys His Val Val Asn Gly | Ala Lys Gly Asn Pro | Arg Asn Ile Ser Val |     |    |
| 145                     | 150                 | 155                 | 160 |    |
| His Pro Ser Ala Lys Asn | Glu Asn Asp Tyr Pro | Asn Gly Lys Phe Val |     |    |
|                         | 165                 | 170                 | 175 |    |
| Gly Gln Glu Ile Ile Pro | Tyr Pro Gly Asn Ser | Asp Leu Ala Ile Leu |     |    |
|                         | 180                 | 185                 | 190 |    |
| Arg Val Ser Pro Asn Glu | His Asn Gln His Ile | Gly Gln Val Val Lys |     |    |
|                         | 195                 | 200                 | 205 |    |
| Pro Ala Thr Ile Ser Ser | Asn Thr Asp Thr Arg | Ile Asn Glu Asn Ile |     |    |
|                         | 210                 | 215                 | 220 |    |
| Thr Val Thr Gly Tyr Pro | Gly Asp Lys Pro Leu | Ala Thr Met Trp Glu |     |    |
| 225                     | 230                 | 235                 | 240 |    |
| Ser Val Gly Lys Val Val | Tyr Ile Gly Gly Glu | Glu Leu Arg Tyr Asp |     |    |
|                         | 245                 | 250                 | 255 |    |
| Leu Ser Thr Val Gly Gly | Asn Ser Gly Ser Pro | Val Phe Asn Gly Lys |     |    |
|                         | 260                 | 265                 | 270 |    |
| Asn Gln Val Ile Gly Ile | His Tyr Gly Gly Val | Asp Asn Lys Tyr Asn |     |    |
|                         | 275                 | 280                 | 285 |    |
| Ser Ser Val Tyr Ile Asn | Asp Phe Val Gln Gln | Phe Leu Arg Asn Asn |     |    |
|                         | 290                 | 295                 | 300 |    |
| Ile Pro Asp Ile Asn Ile | Gln                 |                     |     |    |
| 305                     | 310                 |                     |     |    |

&lt;210&gt; 6233

&lt;211&gt; 268

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6233

|                         |                     |                     |
|-------------------------|---------------------|---------------------|
| Asn Asp Arg Arg Val Asn | Ile Leu Lys Ile Gln | Ile Leu Gln Phe Asn |
| 1                       | 5                   | 10                  |
| Val Glu Arg Gly Asn Val | Asp Lys Asn Met Gln | Asn Ile Lys Thr Lys |
|                         | 20                  | 25                  |
| Phe Asn Gln Tyr Leu Asp | Lys Asp Thr Ser Val | Val Val Leu Pro Glu |
|                         | 35                  | 40                  |
| Met Trp Asn Asn Gly Tyr | Ala Leu Glu Glu Leu | Glu Gln Lys Ala Asp |
|                         | 50                  | 55                  |
| Lys Asn Leu Lys Asp Ser | Ser Leu Phe Ile Lys | Asp Leu Ala His Thr |
| 65                      | 70                  | 75                  |
| Phe Asn Val Asp Ile Ile | Ala Gly Ser Val Ser | Asn Ile Arg Glu Asn |
|                         | 85                  | 90                  |
| His Ile Tyr Asn Thr Ala | Phe Ala Ile Asn Lys | Asn Lys Glu Leu Ile |
|                         | 100                 | 105                 |
| Asn Glu Tyr Asp Lys Val | His Leu Val Pro Met | Leu Arg Glu Pro Asp |
|                         | 115                 | 120                 |

Phe Leu Cys Gly Gly Asn Val Val Pro Glu Pro Phe Tyr Leu Ser Asp  
 130 135 140  
 Gln Thr Leu Val Thr Gln Ile Ile Cys Tyr Asp Leu Arg Phe Pro Glu  
 145 150 155 160  
 Ile Leu Arg Tyr Pro Ala Arg Lys Gly Ala Lys Ile Ala Phe Tyr Val  
 165 170 175  
 Ala Gln Trp Pro Ser Ser Arg Leu Asp His Trp Leu Ser Leu Leu Lys  
 180 185 190  
 Ala Arg Ala Ile Glu Asn Asp Ile Phe Ile Val Ala Cys Asn Ser Cys  
 195 200 205  
 Gly Asp Asp Gly His Thr Asn Tyr Ala Gly Asn Ser Ile Val Ile Asn  
 210 215 220  
 Pro Asn Gly Glu Ile Leu Gly His Leu Asp Asp Lys Glu Gly Val Leu  
 225 230 235 240  
 Thr Thr His Ile Asp Val Asp Leu Val Asp Gln Gln Arg Glu Tyr Ile  
 245 250 255  
 Pro Val Phe Arg Asn Leu Lys Pro His Leu Tyr Lys  
 260 265

&lt;210&gt; 6234

&lt;211&gt; 582

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6234

Glu Gly Arg Arg Met Ile Lys Arg Tyr Leu Lys Phe Val Lys Pro Tyr  
 1 5 10 15  
 Arg Tyr Arg Ile Ala Thr Ile Ile Val Gly Ile Ile Lys Phe Gly  
 20 25 30  
 Ile Pro Met Leu Ile Pro Leu Leu Ile Lys Tyr Ala Ile Asp Gly Val  
 35 40 45  
 Ile Asn Asn His Ser Leu Thr Asn Gln Glu Lys Phe Ser His Leu Gly  
 50 55 60  
 Val Ala Ile Gly Ile Ala Leu Phe Ile Phe Leu Ile Val Arg Pro Pro  
 65 70 75 80  
 Ile Glu Phe Ile Arg Gln Tyr Leu Ala Gln Trp Thr Ser Asn Lys Ile  
 85 90 95  
 Leu Tyr Asp Ile Arg Lys Gln Leu Tyr Asn His Leu Gln Ala Leu Ser  
 100 105 110  
 Val Arg Phe Tyr Ala Asn Asn Gln Val Gly Gln Val Ile Ser Arg Val  
 115 120 125  
 Ile Asn Asp Val Glu Gln Thr Lys Asp Phe Ile Leu Thr Gly Leu Met  
 130 135 140  
 Asn Ile Trp Leu Asp Cys Ile Thr Ile Ile Ile Ala Leu Ser Ile Met  
 145 150 155 160  
 Phe Phe Leu Asp Val Lys Leu Thr Phe Ala Ala Ile Phe Ile Phe Pro  
 165 170 175  
 Phe Tyr Ile Leu Thr Val Tyr Phe Phe Gly Arg Leu Arg Lys Leu  
 180 185 190  
 Thr Arg Val Arg Ser Gln Ala Leu Ala Glu Val Gln Gly Phe Leu His  
 195 200 205  
 Glu Arg Val Gln Gly Met Ser Val Ile Lys Ser Phe Ala Ile Glu Asp  
 210 215 220  
 Asn Glu Ala Lys Asn Phe Asp Asn His Asn Lys Asn Phe Leu Gln Arg  
 225 230 235 240  
 Ala Phe Gln His Thr Arg Trp Asn Ala Tyr Ser Phe Ala Ala Ile Asn



<210> 6236  
 <211> 43  
 <212> PRT  
 <213> S.epidermidis

<400> 6236  
 Ser Arg Glu Leu Gly Arg Asp Ser Arg Leu Asp Asn Leu Leu Leu Arg  
 1 5 10 15  
 Glu Cys Phe Tyr Ser Tyr Phe Phe Asn Leu Phe Phe Gly Asp Val Ile  
 20 25 30  
 Asn Tyr Glu Lys Ile Leu Val Asn Leu Ser Ile  
 35 40

<210> 6237  
 <211> 45  
 <212> PRT  
 <213> S.epidermidis

<400> 6237  
 Trp Ser Arg Ser Val Ala Val Asn Thr Pro Ala Cys His Ala Gly Asp  
 1 5 10 15  
 Arg Gly Phe Asp Ser Arg Arg Asp Arg His Leu Leu Asn Phe Asn Ser  
 20 25 30  
 Tyr Leu Pro Ile Ile Cys Gly Gly Ile Pro Lys Ser Gly  
 35 40 45

<210> 6238  
 <211> 59  
 <212> PRT  
 <213> S.epidermidis

<400> 6238  
 Ser Ala Arg Arg Arg Phe Phe Lys Ser Asp Val Lys Ala His Gly Ser  
 1 5 10 15  
 Thr Val Glu Gly His Trp Lys Leu Glu Asn Leu Ser Ala Glu Glu Glu  
 20 25 30  
 Ser Gly Ile Pro Cys Val Ala Val Lys Cys Ala Glu Ile Trp Arg Asn  
 35 40 45  
 Thr Ser Gly Glu Gly Asp Phe Leu Val Cys Asn  
 50 55

<210> 6239  
 <211> 68  
 <212> PRT  
 <213> S.epidermidis

<400> 6239  
 Leu Cys Trp Leu Ser Asn Pro His His Leu Ser Trp Trp Glu Thr Val  
 1 5 10 15  
 Ser Gly Gly Gln Phe Asp Trp Gly Gly Arg Leu Leu Lys Gly Asn Gly  
 20 25 30  
 Gly Ala Gln Arg Phe Pro Gln Asn Gly Trp Lys Ser Phe Ile Glu Cys  
 35 40 45  
 Lys Gly Ile Arg Glu Leu Asp Cys Glu Thr Tyr Lys Ser Ser Arg Val  
 50 55 60

Glu Arg Arg Thr  
65

<210> 6240  
<211> 137  
<212> PRT  
<213> S.epidermidis

<400> 6240  
Ser Leu Ile Ser Asp Glu Val Ile Ser Leu Asn Ile Leu Asp Leu Tyr  
1 5 10 15  
Leu Gln Gln Phe Ile Lys Arg Ile Thr Lys Lys Ser Ile Asn Asp Tyr  
20 25 30  
Lys Met Ser Leu Asp Lys Gln Ile Lys Asn Ile Asp Thr Tyr Ile Asn  
35 40 45  
Tyr Leu Arg Glu Lys Arg Leu Gln Leu Lys Lys Leu Ile Asp Thr Leu  
50 55 60  
Thr Leu Ser Leu Glu Asn Lys Tyr Ile Asp Leu Val Asn Asn Gln Ala  
65 70 75 80  
Ile Tyr Cys Ala Glu Glu Ile His Asp Asn Asp Ile Asp Met Ile Lys  
85 90 95  
Ser Gln Leu Asn Asp Ala Glu Ser Tyr Tyr Ala Arg Ile Glu Ala Asp  
100 105 110  
Ile Asn Leu Gln Ser Arg Met Lys Ile Thr Thr Glu Glu Ala Phe His  
115 120 125  
Phe Ile Tyr His Met Ser Ala Val Ala  
130 135

<210> 6241  
<211> 43  
<212> PRT  
<213> S.epidermidis

<400> 6241  
Leu Val Ile Ser Arg Leu Gly Val Gln Val Leu Trp Pro Ala Pro Ser  
1 5 10 15  
Phe Glu Pro Leu Ala Gln Leu Val Glu His Leu Thr Phe Asn Gln Arg  
20 25 30  
Val Arg Gly Ser Asn Pro Leu Trp Leu Thr Ile  
35 40

<210> 6242  
<211> 196  
<212> PRT  
<213> S.epidermidis

<400> 6242  
Met Gly Arg Leu Ile Leu Val Ile Arg Ser Asp Asp Met Asp Lys Leu  
1 5 10 15  
Thr Pro Lys Gln Glu Arg Phe Ala Asn Glu Tyr Ile Lys Thr Leu Asn  
20 25 30  
Val Thr Gln Ser Ala Ile Lys Ala Gly Tyr Ser Pro Asn Ser Ala His  
35 40 45  
Val Thr Gly Ser Arg Leu Leu Arg Lys Glu Lys Val Asp Lys Tyr Ile  
50 55 60  
Lys Ser Lys Lys Asp Glu Ile Met Asp Asp Thr Ile Leu Ser Ala Lys







Lys Glu Glu Lys Trp Ile Tyr Ile Glu Leu  
500 505

<210> 6246  
<211> 193  
<212> PRT  
<213> S.epidermidis

<400> 6246  
Phe Arg Leu Arg Ala Cys Val Asn Met Asp Lys Ile Thr Phe Leu Asn  
1 5 10 15  
Glu Leu Glu Leu Ala Leu Asp Asp Leu Pro Arg Glu Glu Lys Asp Ser  
20 25 30  
Ile Met His Lys Tyr Glu Asn Leu Phe Tyr Glu Glu Glu Leu Lys Gly  
35 40 45  
Ile Ser Glu Ser Gln Ile Ile Lys Lys Leu Asn Asp Pro Tyr His Ile  
50 55 60  
Ser Lys Glu Val Lys Ala Arg Ser Ala Ile His Tyr Ala Ser Tyr Lys  
65 70 75 80  
Pro Thr Leu Ala Asn Ile Val Arg Ala Ile Leu Ala Ser Leu Ser Leu  
85 90 95  
Gly Ile Leu Ser Leu Phe Ile Ile Leu Ile Pro Val Val Ile Ile Ala  
100 105 110  
Leu Leu Ile Leu Phe Cys Phe Leu Ile Ser Ile Cys Phe Ile Phe Ala  
115 120 125  
Pro Phe Val Leu Leu Phe Tyr Ser Val Leu His Gly Phe Glu Asn Ala  
130 135 140  
Ile Ser Asn Val Phe Phe Ser Ile Ser Phe Thr Gly Leu Gly Ile Met  
145 150 155 160  
Phe Ile Val Ile Thr Leu Lys Ile Gly Glu Ile Ile His Lys Leu Ile  
165 170 175  
Leu Lys Tyr Leu Leu Trp Tyr Ile Lys Thr Val Lys Gly Ser Val Lys  
180 185 190  
Glu

<210> 6247  
<211> 44  
<212> PRT  
<213> S.epidermidis

<400> 6247  
Asn Ala Gln Arg Tyr Gly Gly Thr Pro Val Ala Lys Ala Thr Phe Trp  
1 5 10 15  
Ser Val Thr Asp Ala Asp Val Arg Lys Arg Gly Asp Gln Thr Gly Leu  
20 25 30  
Asp Thr Leu Val Val His Ala Val Asn Asp Glu Cys  
35 40

<210> 6248  
<211> 244  
<212> PRT  
<213> S.epidermidis

<400> 6248  
Ile Met Lys Ser Leu Gln Leu Val Lys Tyr Asp Leu Ile Ser Ile Leu



Lys Lys Arg Ala Glu Leu Tyr Glu Met Leu Thr Glu Arg Glu Met Glu  
 145 150 155 160  
 Ile Leu Leu Leu Ile Ala Lys Gly Tyr Ser Asn Gln Glu Ile Ala Ser  
 165 170 175  
 Ala Ser His Ile Thr Ile Lys Thr Val Lys Thr His Val Ser Asn Ile  
 180 185 190  
 Leu Ser Lys Leu Glu Val Gln Asp Arg Thr Gln Ala Val Ile Tyr Ala  
 195 200 205  
 Phe Gln His Asn Leu Ile Gln  
 210 215

<210> 6250

<211> 46

<212> PRT

<213> S.epidermidis

<400> 6250

Val Leu Ser Gly Leu Asp Ser Ile His Asp Lys Phe Met Leu Asn Lys  
 1 5 10 15  
 Val Lys Val Phe Lys Thr Leu Ala Lys Ser Pro Gly Leu Ser Tyr Leu  
 20 25 30  
 Gly Val Ile Arg Lys Ile Val Val Phe Gly Cys Ser Ile Lys  
 35 40 45

<210> 6251

<211> 68

<212> PRT

<213> S.epidermidis

<400> 6251

Tyr Leu Gly Gly Lys Met Ile Lys Leu Thr Asn Pro Ala Val Thr Ser  
 1 5 10 15  
 Pro Ile Arg Ala Val Ser Asn Arg Glu Lys Lys Leu Asn Thr Tyr Ala  
 20 25 30  
 Ser Cys Ile Pro Gly Ile Ile Ala Thr Glu Val Asn Thr Ala Thr Val  
 35 40 45  
 Val Pro Thr Cys Lys Leu Ser Leu Val His Ile Arg Met Val Asn Val  
 50 55 60  
 Ala Leu Lys Ala  
 65

<210> 6252

<211> 167

<212> PRT

<213> S.epidermidis

<400> 6252

Tyr Asn Ile Leu Asn Tyr Ser Arg Glu Gly Phe Tyr Ile Arg Asn Leu  
 1 5 10 15  
 Glu Thr Tyr Phe Asn Lys Ser Gln Thr Leu Asn Glu Phe Ile Asn Lys  
 20 25 30  
 Ile Gln Glu Ser Lys Asp Asn Leu Leu Ser Ile Tyr Asn Phe Phe His  
 35 40 45  
 Leu Pro Leu Asn Asp Ala Arg Leu Asn Gln Leu Arg Glu Ser Asn Tyr  
 50 55 60  
 Tyr Lys Val Leu Ile Ile Lys Glu Asp Trp Cys Gly Asp Ala Met Met

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<210> 6253
<211> 666
<212> PRT
<213> S.epidermidis
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|            |         |         |         |         |     |         |         |         |         |         |         |         |         |         |         |  |
|------------|---------|---------|---------|---------|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--|
| <400> 6253 |         |         |         |         |     |         |         |         |         |         |         |         |         |         |         |  |
| Gly 1      | Met     | Gln     | Gly     | Val 5   | Lys | Lys     | Arg     | Val     | Glu 10  | Lys     | Leu     | His     | Asp     | Leu 15  | Leu     |  |
| Asn        | Gln     | Tyr     | Ser 20  | Tyr     | Glu | Tyr     | Tyr     | Val 25  | Gln     | Asp     | Asn     | Pro     | Ser 30  | Val     | Pro     |  |
| Asp        | Ser     | Glu     | Tyr     | Asp     | Lys | Leu     | Leu 40  | His     | Glu     | Leu     | Ile     | Glu 45  | Ile     | Glu     | Glu     |  |
| Lys        | Tyr 50  | Pro     | Glu     | Phe     | Lys | Ser 55  | Thr     | Asp     | Ser     | Pro     | Thr 60  | Val     | Arg     | Val     | Gly     |  |
| Gly 65     | Glu     | Ala     | Gln     | Ser 70  | Ser | Phe     | Glu     | Lys     | Val     | Asn 75  | His     | Asp     | Thr     | Pro     | Met 80  |  |
| Leu        | Ser     | Leu     | Gly 85  | Asn     | Ala | Phe     | Asn     | Glu     | Glu 90  | Asp     | Leu     | Arg     | Lys     | Phe 95  | Asp     |  |
| Gln        | Arg     | Ile     | Arg 100 | Asp     | Ser | Ile     | Gly     | Lys 105 | Val     | Glu     | Tyr     | Met     | Cys 110 | Glu     | Leu     |  |
| Lys        | Ile     | Asp 115 | Gly     | Leu     | Ala | Val     | Ser 120 | Leu     | Lys     | Tyr     | Glu     | Asn 125 | Gly     | Arg     | Phe     |  |
| Val        | Gln 130 | Gly     | Leu     | Thr     | Arg | Gly 135 | Asp     | Gly     | Thr     | Thr     | Gly 140 | Glu     | Asp     | Ile     | Thr     |  |
| Glu 145    | Asn     | Leu     | Arg     | Thr 150 | Ile | His     | Ala     | Ile     | Pro     | Leu 155 | Lys     | Ile     | Lys     | Glu     | Pro 160 |  |
| Leu        | Asn     | Phe     | Glu     | Val 165 | Arg | Gly     | Glu     | Ala     | Tyr 170 | Met     | Pro     | Arg     | Arg     | Ser 175 | Phe     |  |
| Ile        | His     | Leu     | Asn 180 | Asn     | Glu | Lys     | Glu     | Gln 185 | Asn     | Gly     | Glu     | Gln     | Pro 190 | Phe     | Ala     |  |
| Asn        | Pro     | Arg 195 | Asn     | Ala     | Ala | Ala     | Gly 200 | Ser     | Leu     | Arg     | Gln     | Leu     | Asp 205 | Ser     | Lys     |  |
| Leu        | Ala 210 | Ala     | Lys     | Arg     | Lys | Leu     | Ser 215 | Val     | Phe     | Leu     | Tyr 220 | Ser     | Val     | Asn     | Asp     |  |
| Leu 225    | Thr     | Glu     | Phe     | Asn 230 | Ala | Thr     | Thr     | Gln     | Ser     | Glu 235 | Ala     | Leu     | Glu     | Glu     | Leu 240 |  |
| Asp        | Gln     | Leu     | Gly 245 | Phe     | Lys | Thr     | Asn     | Gln     | Glu 250 | Arg     | Glu     | Arg     | Val     | Ser 255 | Asp     |  |
| Ile        | Glu     | Gly 260 | Val     | Leu     | Asn | Tyr     | Ile     | Glu 265 | Lys     | Trp     | Thr     | Ser     | Lys 270 | Arg     | Gly     |  |
| Ser        | Leu     | Ser 275 | Tyr     | Asp     | Ile | Asp     | Gly 280 | Ile     | Val     | Ile     | Lys     | Val     | Asn 285 | Asp     | Leu     |  |

Ser Gln Gln Glu Glu Met Gly Tyr Thr Gln Lys Ser Pro Arg Trp Ala  
 290 295 300  
 Ile Ala Tyr Lys Phe Pro Ala Glu Glu Val Ile Thr Lys Leu Leu Asp  
 305 310 315 320  
 Ile Glu Leu Ser Ile Gly Arg Thr Gly Val Val Thr Pro Thr Ala Ile  
 325 330 335  
 Leu Glu Pro Val Lys Val Ala Gly Thr Thr Val Ser Arg Ala Ser Leu  
 340 345 350  
 His Asn Glu Asp Leu Ile His Glu Arg Asp Ile Arg Ile Gly Asp Ser  
 355 360 365  
 Val Val Ile Lys Lys Ala Gly Asp Ile Ile Pro Glu Val Val Lys Ser  
 370 375 380  
 Ile Leu Asp Arg Arg Pro Asn Glu Ser Glu Ile Tyr His Met Pro Thr  
 385 390 395 400  
 His Cys Pro Ser Cys Gly His Glu Leu Val Arg Ile Glu Gly Glu Val  
 405 410 415  
 Ala Leu Arg Cys Ile Asn Pro Lys Cys Gln Ala Gln Leu Ile Glu Gly  
 420 425 430  
 Leu Ile His Phe Val Ser Arg Gln Ala Met Asn Ile Asp Gly Leu Gly  
 435 440 445  
 Thr Lys Ile Ile His Gln Leu Tyr Glu Asn Gln Leu Ile Lys Asp Val  
 450 455 460  
 Ala Asp Ile Phe Tyr Leu Lys Glu Glu Asp Leu Leu Pro Leu Glu Arg  
 465 470 475 480  
 Met Gly Lys Lys Lys Val Asp Asn Leu Leu Leu Ala Ile Glu Lys Ser  
 485 490 495  
 Lys Glu Gln Ser Leu Glu His Leu Leu Phe Gly Leu Gly Ile Arg His  
 500 505 510  
 Leu Gly Val Lys Ala Ser Gln Val Leu Ala Glu Arg Tyr Glu Thr Met  
 515 520 525  
 Asp Gln Leu Phe Lys Val Thr Glu Ser Glu Leu Ile Glu Ile Gln Asp  
 530 535 540  
 Ile Gly Asp Lys Leu Ala Gln Ser Val Val Thr Tyr Leu Glu Asn Ser  
 545 550 555 560  
 Asp Ile Arg Ser Leu Ile Glu Lys Leu Ser Asn Lys Asn Val Asn Met  
 565 570 575  
 Ser Tyr Lys Gly Ile Lys Thr Thr Glu Ile Glu Gly His Pro Asp Phe  
 580 585 590  
 Ser Gly Lys Thr Ile Val Leu Thr Gly Lys Leu Glu Gln Met Thr Arg  
 595 600 605  
 Asn Glu Ala Ser Glu Trp Leu Lys Met Gln Gly Ala Lys Val Thr Asn  
 610 615 620  
 Ser Val Thr Lys Ser Thr Asp Ile Val Ile Ala Gly Ala Asp Ala Gly  
 625 630 635 640  
 Ser Lys Leu Ala Lys Ala Glu Lys Tyr Gly Thr Glu Ile Trp Thr Glu  
 645 650 655  
 Ala Ala Phe Ile Glu Lys Gln Asn Gly Ile  
 660 665

&lt;210&gt; 6254

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6254

Phe Lys Arg Gly Gly Ile Met His Leu Tyr Tyr Leu Gly Pro Lys Gly

```

1           5           10           15
Thr Phe Ser Tyr Leu Ala Ala Lys Gln Phe Glu Ser His Glu Gln Tyr
20           25           30
Asp Phe Ile Pro Leu Ser Asn Leu His Glu Val Ile Gln Ser Val Ser
35           40           45
Lys Asp Lys Gln Ala Val Gly Ile Val Pro Ile Glu Asn Ser Ile Glu
50           55           60
Gly Thr Ile Asn Ile Val Ala Asp Ser Leu Ala His His Asp Val Tyr
65           70           75           80
Ala His Gly Glu Ile Gln Leu Asp Ile Asp Phe Ser Leu Tyr Gly His
85           90           95
His Ser Asn Ser Leu Asp Asp Ile His Lys Val Tyr Ser Ile Ala Pro
100          105          110
Ala Ile Ser Gln Thr Ile Asn Tyr Ile His Arg Gln Gln Phe Asp Tyr
115          120          125
Asp Tyr Val Asp Ser Thr Ile Gln Ser Leu Asn Met Ile Lys Asp Gly
130          135          140
Ile Gly Ala Ile Ala Pro Leu Gly Ser Gly Glu Thr Tyr Gly Tyr His
145          150          155          160
Thr Leu Asp Gln His Ile Gln Asp Tyr Pro His Asn Val Thr Arg Phe
165          170          175
Leu Val Val Lys Asn His Thr His Phe Ile Glu His Pro Asn Thr Thr
180          185          190
Ile Phe Leu Ile Thr Pro Lys Tyr Asp Lys Pro Gly Leu Leu Ala Ser
195          200          205
Val Leu Asn Thr Phe Thr Leu Phe Asn Ile Asn Leu Ser Trp Ile Glu
210          215          220
Ser Arg Pro Leu Lys Thr Gln Leu Gly Met Tyr His Phe Tyr Val Gln
225          230          235          240
Ala Asp Thr Ala Ile Asn Asn Asp Val Asn Lys Ile Ile Ser Ile Leu
245          250          255
Glu Thr Leu Asp Phe Gln Val Lys Ile Ile Gly Ala Phe Asn Lys Lys
260          265          270
Asn

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&lt;210&gt; 6255

&lt;211&gt; 186

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6255

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Arg Thr Gly Gly Val Asn Val His Lys Ile Asp Leu Ser Gly Asn Lys
1           5           10           15
Phe Gln Ile Gln Arg Phe Val Leu Leu Gln Ile Val Leu Ala Leu Phe
20           25           30
Thr Ile Leu Phe Thr Tyr Lys Trp Ala Tyr Gln Thr Thr His Ile Ile
35           40           45
Glu Gln Asn Leu Val Met Asn Leu Ile Phe Gly Phe Val Gly Phe Ala
50           55           60
Val Leu Val Ile Leu His Glu Phe Ile His Arg Ile Leu Phe Ile Ile
65           70           75           80
Phe Ser Lys Gly Glu Lys Pro Ser Leu Lys Tyr Asp Lys Asn Lys Ile
85           90           95
Ile Val Gln Phe Ser Gln Thr Cys Phe His Arg Trp Gln Phe Thr Ile
100          105          110

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Ile Met Ile Ala Pro Leu Val Ile Ile Ser Ala Thr Leu Leu Ala Leu  
 115 120 125  
 Ile Gln Ile Tyr Ser Phe Ser Ser Leu Ile Phe Met Phe Ser Ile His  
 130 135 140  
 Thr Ser Tyr Cys Met Ile Asp Val Phe Leu Val Ala Leu Ala Leu Gln  
 145 150 155 160  
 Ser Lys Phe Lys Tyr Ile Gln Thr Tyr Gly Glu Gly Leu Tyr Leu Tyr  
 165 170 175  
 His Gln Lys Pro Thr Gln Thr Tyr Tyr Glu  
 180 185

<210> 6256

<211> 348

<212> PRT

<213> S.epidermidis

<400> 6256

Phe Tyr Gly Gly Phe Gly Met Thr Leu Gly Tyr Ile Gly Ser Tyr Thr  
 1 5 10 15  
 Lys Lys Ser Gly Lys Gly Ile Tyr Arg Phe Lys Leu Asn Asp Glu Thr  
 20 25 30  
 Gly Val Ile Glu Ala Leu Glu Thr Gly Tyr Glu Ile Glu Ala Ser Thr  
 35 40 45  
 Tyr Leu Thr Arg Asn Glu Ser Phe Leu Tyr Ala Ile Thr Lys Glu Gly  
 50 55 60  
 Glu Glu Cys Gly Val Ala Ser Phe Ser Ile Lys Glu Asp Gly Gln Leu  
 65 70 75 80  
 Glu Leu Ile Asn Lys Cys Leu Ala Ser Lys Gln Gly Thr Gly Cys Tyr  
 85 90 95  
 Ile Gln Val Ser Ser Asn Gly Lys Tyr Leu Phe Glu Ala Val Tyr Gly  
 100 105 110  
 Ala Gly Leu Ala Arg Ile Tyr Lys Leu Asn Pro Ile Thr Gly Ala Ile  
 115 120 125  
 Glu Lys Leu Ile Glu Glu Leu Glu His Glu Phe Pro Thr Gly Ser His  
 130 135 140  
 Glu Arg Gln Asp Ser Ser His Val His Phe Leu Asn Glu Thr Pro Asp  
 145 150 155 160  
 His Lys Tyr Val Val Ala Thr Asp Leu Gly Thr Asp Arg Val Val Thr  
 165 170 175  
 Tyr Lys Phe Gly Glu Asp Gly Leu Lys Gln Tyr Ala Val Ser Gln Phe  
 180 185 190  
 Lys Asn Ser Asp Gly Pro Arg His Ile Ala Phe Ser Asn Asp Gly Arg  
 195 200 205  
 His Ala Tyr Ile Val His Glu Leu Ser Asn Glu Val Ser Val Thr Glu  
 210 215 220  
 Tyr Gln Asp Gly Lys Phe Ile Glu Leu Glu Arg His Ser Thr Ile Pro  
 225 230 235 240  
 Ser Asp Phe Asn Gly Glu Ser Lys Leu Ala Ala Val Arg Leu Ser His  
 245 250 255  
 Asp Gly Lys His Leu Tyr Ile Ser Asn Arg Gly His Asp Ser Ile Ala  
 260 265 270  
 Ile Phe Glu Val Leu Glu Asp Gly Arg Ser Leu Arg Ser Ile Glu Ile  
 275 280 285  
 Gln Pro Ser Tyr Asp Ala Phe Pro Arg Asp Phe Asn Ile Thr Glu Ser  
 290 295 300  
 Asp Asn Tyr Leu Ile Cys Ala His Gln Glu Gly Glu Ser Lys Val Ser



305                      310                      315                      320  
 Ile Phe Glu Arg Asp Asn Ile Thr Gly Lys Leu Ser Leu Lys Asp Lys  
                                  325                      330                      335  
 Lys Ala Ile Ala Asn Glu Gly Val Cys Val Leu Leu  
                                  340                      345

<210> 6257  
 <211> 56  
 <212> PRT  
 <213> S.epidermidis

<400> 6257  
 Asp Gly Gly Gly Gly Gln Ile Arg Thr Ala Glu Pro Glu Gly Ala Asp  
 1                                      5                                      10                                      15  
 Leu Gln Ser Ala Ala Phe Ser His Phe Ala Thr Pro Pro Lys Trp Cys  
                                  20                                      25                                      30  
 Arg Pro Glu Asp Leu Asn Pro Gln Pro Thr Asp Tyr Lys Ser Val Ala  
                                  35                                      40                                      45  
 Leu Pro Ile Glu Leu Gly Arg Leu  
                                  50                                      55

<210> 6258  
 <211> 54  
 <212> PRT  
 <213> S.epidermidis

<400> 6258  
 Asn Glu Leu Gly Val Cys Leu Asn Ile Ile Asn Trp Gly Asp Tyr Asp  
 1                                      5                                      10                                      15  
 Leu Trp Leu Thr Gln Ile Glu Lys Ala Lys Lys Cys Gln Met Leu Asn  
                                  20                                      25                                      30  
 Ala Ser Lys Gln Asp Arg Tyr Ile His Lys Ile Pro Ile Ile Ile Thr  
                                  35                                      40                                      45  
 Gln Cys Ser Val Glu Leu  
                                  50

<210> 6259  
 <211> 187  
 <212> PRT  
 <213> S.epidermidis

<400> 6259  
 Ile Glu Met Gly Lys Leu Gly Gln Gln Ile Ile Gly Tyr His Cys Asn  
 1                                      5                                      10                                      15  
 Asp Glu Val Lys Ile Asp Lys Phe Lys Asn Arg Glu Val Ser Leu Leu  
                                  20                                      25                                      30  
 Ile Ser Tyr Glu Asp Asp Ile Trp Leu Gly Asn Gly Met Tyr Phe Trp  
                                  35                                      40                                      45  
 Glu Asn Lys Ser Asn Leu Asp Tyr Trp Lys Arg Asn Arg Glu Arg Asn  
                                  50                                      55                                      60  
 Tyr Pro Asp Lys Asn Phe Ser Ser Val Glu Val Met Leu Ser Leu Asp  
 65                                      70                                      75                                      80  
 Phe Leu Leu Asp Leu Ser Asp Lys Glu His Arg Lys Phe Cys Lys Lys  
                                  85                                      90                                      95  
 Val Leu Ser Asp Leu Ile Glu Arg Gly Lys Asp Asn Gly Ile Asp Glu  
                                  100                                      105                                      110

Ser Ile Phe Asn Asn Asp Leu Gly Glu Val Ile Asn Val Leu Phe Ser  
           115                  120          125  
 Lys Thr Asp Ile Leu Ala Ser His Phe Asn Val Leu Arg Thr His Gly  
       130                  135          140  
 Leu Tyr Asn Trp Ser Glu Asp Lys Phe Leu Val Gly Asn Asp Asn Lys  
 145                  150          155          160  
 Tyr Gln Ser Val Asn Arg Pro Thr Ser Asn Val Lys Thr Ile Tyr Cys  
                   165          170          175  
 Val Lys Asn Glu Arg Ala Ile Leu Glu Ile Leu  
           180                  185

<210> 6260

<211> 44

<212> PRT

<213> S.epidermidis

<400> 6260

Arg Ala Ala Gly Val Arg Ile Pro Leu Pro Pro Pro Leu Ile Ile Ser  
 1                  5          10          15  
 Ala Gly Trp Ser Ser Ser Val Ala Arg Arg Ala His Asn Pro Lys Val  
                   20          25          30  
 Gly Gly Ser Asn Pro Pro Pro Ala Ile Leu Leu Ile  
           35                  40

<210> 6261

<211> 518

<212> PRT

<213> S.epidermidis

<400> 6261

Leu Ile Lys Gly Val Leu Ile Met Leu Thr Leu Gly Thr Ala Leu Ser  
 1                  5          10          15  
 Asn Gln Ile Asp Ala Asn Trp Gln Thr Tyr Val Met Ile Ile Val Tyr  
                   20          25          30  
 Phe Ile Ile Leu Leu Ile Ile Gly Phe Tyr Gly Tyr Arg Gln Ala Thr  
                   35          40          45  
 Gly Asn Leu Ser Glu Phe Met Leu Gly Gly Arg Ser Ile Gly Pro Tyr  
           50                  55          60  
 Ile Thr Ala Leu Ser Ala Gly Ala Ser Asp Met Ser Gly Trp Met Ile  
 65                  70          75          80  
 Met Gly Leu Pro Gly Ser Val Tyr Ser Thr Gly Leu Ser Ala Ile Trp  
                   85          90          95  
 Ile Thr Ile Gly Leu Thr Leu Gly Ala Tyr Ile Asn Tyr Phe Val Val  
                   100          105          110  
 Ala Pro Arg Leu Arg Val Tyr Thr Glu Ile Ala Gly Asp Ala Ile Thr  
           115                  120          125  
 Leu Pro Asp Phe Phe Lys Asn Arg Leu Asp Asp Lys Lys Asn Ile Ile  
           130                  135          140  
 Lys Ile Ile Ser Gly Leu Ile Ile Val Val Phe Phe Thr Leu Tyr Thr  
 145                  150          155          160  
 His Ser Gly Phe Val Ser Gly Gly Lys Leu Phe Glu Ser Ala Phe Gly  
                   165          170          175  
 Leu Asn Tyr His Ala Gly Leu Leu Ile Val Ala Ile Ile Val Ile Phe  
                   180          185          190  
 Tyr Thr Phe Phe Gly Gly Tyr Leu Ala Val Ser Ile Thr Asp Phe Phe  
           195                  200          205

Gln Gly Val Ile Met Leu Ile Ala Met Val Met Val Pro Ile Val Ala  
 210 215 220  
 Leu Leu Lys Leu Asn Gly Trp Asp Thr Phe His Asp Ile Ala Gln Met  
 225 230 235 240  
 Lys Pro Thr Asn Leu Asp Leu Phe Arg Gly Thr Thr Val Leu Gly Ile  
 245 250 255  
 Val Ser Leu Phe Ser Trp Gly Leu Gly Tyr Phe Gly Gln Pro His Ile  
 260 265 270  
 Ile Val Arg Phe Met Ser Ile Lys Ser His Lys Leu Leu Pro Lys Ala  
 275 280 285  
 Arg Arg Leu Gly Ile Ser Trp Met Ala Val Gly Leu Leu Gly Ala Ile  
 290 295 300  
 Gly Val Gly Leu Thr Gly Ile Ser Phe Ile Ser Glu Arg His Ile Lys  
 305 310 315 320  
 Leu Glu Asp Pro Glu Thr Leu Phe Ile Val Met Ser Gln Ile Leu Phe  
 325 330 335  
 His Pro Leu Val Gly Gly Phe Leu Leu Ala Ala Ile Leu Ala Ala Ile  
 340 345 350  
 Met Ser Thr Ile Ser Ser Gln Leu Leu Val Thr Ser Ser Ser Leu Thr  
 355 360 365  
 Glu Asp Phe Tyr Lys Leu Ile Arg Gly Ser Asp Lys Ala Ser Ser His  
 370 375 380  
 Gln Lys Glu Phe Val Leu Ile Gly Arg Leu Ser Val Leu Leu Val Ala  
 385 390 395 400  
 Ile Val Ala Ile Thr Ile Ala Trp His Pro Asn Asp Thr Ile Leu Asn  
 405 410 415  
 Leu Val Gly Asn Ala Trp Ala Gly Phe Gly Ala Ala Phe Ser Pro Leu  
 420 425 430  
 Val Leu Tyr Ser Leu Tyr Trp Lys Asp Leu Thr Arg Ala Gly Ala Ile  
 435 440 445  
 Ser Gly Met Val Ala Gly Ala Val Val Val Ile Val Trp Ile Ser Trp  
 450 455 460  
 Ile Lys Pro Leu Ala Thr Ile Asn Ala Phe Phe Gly Met Tyr Glu Ile  
 465 470 475 480  
 Ile Pro Gly Phe Ile Val Ser Val Leu Ile Thr Tyr Ile Val Ser Lys  
 485 490 495  
 Leu Thr Lys Lys Pro Asp Asp Tyr Val Ile Glu Asn Leu Asn Lys Val  
 500 505 510  
 Lys His Val Val Lys Glu  
 515

&lt;210&gt; 6262

&lt;211&gt; 238

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6262

Met Lys Ile Phe Val Cys Glu Asp Asp Gln Arg Gln Arg Glu His Met  
 1 5 10 15  
 Val Ser Ile Ile Lys Asn Tyr Ile Met Ile Glu Glu Lys Pro Met Glu  
 20 25 30  
 Leu Ala Leu Ala Thr Asn Asp Pro Tyr Glu Val Leu Glu Gln Ser Lys  
 35 40 45  
 Glu Leu Asn Asp Ile Gly Cys Tyr Phe Leu Asp Ile Gln Leu Glu Ala  
 50 55 60  
 Asp Met Asn Gly Ile Lys Leu Ala Ser Glu Ile Arg Lys His Asp Pro

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Val | Gly | Asn | Ile | Ile | Phe | Val | Thr | Ser | His | Ser | Glu | Leu | Thr | Tyr | Leu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Thr | Phe | Val | Tyr | Lys | Val | Ala | Ala | Met | Asp | Phe | Ile | Phe | Lys | Asp | Asp |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Pro | Ser | Glu | Leu | Lys | Met | Arg | Ile | Ile | Asp | Cys | Leu | Glu | Thr | Ala | His |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Thr | Arg | Leu | Lys | Leu | Leu | Ser | Lys | Glu | Ser | Asn | Val | Asp | Thr | Ile | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Lys | Arg | Gly | Ser | Asn | Ser | Val | Tyr | Val | Gln | Tyr | Asp | Asp | Ile | Met |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Phe | Phe | Glu | Ser | Ser | Thr | Lys | Ser | His | Arg | Leu | Ile | Ala | His | Leu | Asp |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Asn | Arg | Gln | Ile | Glu | Phe | Tyr | Gly | Asn | Leu | Lys | Glu | Leu | Ala | Gln | Leu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Asp | Glu | Arg | Phe | Phe | Arg | Cys | His | Asn | Ser | Phe | Val | Ile | Asn | Arg | His |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Asn | Ile | Glu | Ser | Ile | Asp | Ser | Lys | Glu | Arg | Ile | Val | Tyr | Phe | Lys | Asn |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Gly | Glu | Asn | Cys | Phe | Ala | Ser | Val | Arg | Asn | Val | Lys | Lys | Ile |     |     |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     |     |

<210> 6263  
 <211> 69  
 <212> PRT  
 <213> S.epidermidis

<400> 6263  
 Asp Asn Ile Ile Val Val Asn Thr Ser Lys Lys Glu Phe Gln Tyr Leu  
 1 5 10 15  
 Met Ser Glu Gln Gln Thr Ile Asp Gln Ile Lys Thr Arg Leu Asn Lys  
 20 25 30  
 Phe Ile Glu Asp Ile Asp His Val Asn Pro Asp Glu Val Arg Val Glu  
 35 40 45  
 Asp Ile Asp Glu Trp Ile Gly Leu Leu Asp Gln Leu Glu Glu Lys Val  
 50 55 60  
 Lys Gln Val Ser Lys  
 65

<210> 6264  
 <211> 175  
 <212> PRT  
 <213> S.epidermidis

<400> 6264  
 Cys His Ile Met Ala Lys Lys Val Ala Ile Ile Leu Ala Asp Glu Phe  
 1 5 10 15  
 Glu Asp Ile Glu Leu Thr Ser Pro Lys Glu Ala Leu Glu Asn Ala Gly  
 20 25 30  
 Phe Glu Thr Glu Val Ile Gly Asp Thr Ala Asn His Glu Val Val Gly  
 35 40 45  
 Lys His Gly Glu Lys Val Thr Val Asp Val Ser Ile Ala Asp Ala Lys  
 50 55 60  
 Pro Glu Asn Tyr Asp Ala Leu Leu Ile Pro Gly Gly Phe Ser Pro Asp  
 65 70 75 80  
 His Leu Arg Gly Asp Glu Glu Gly Arg Tyr Gly Thr Phe Ala Lys Tyr

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |
| Phe | Thr | Lys | Asn | Asp | Val | Pro | Thr | Phe | Ala | Ile | Cys | His | Gly | Pro | Leu |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Val | Leu | Val | Asp | Thr | Asp | Asp | Leu | Lys | Gly | Arg | Thr | Ile | Thr | Gly | Val |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |
| Ile | Asn | Val | Arg | Lys | Asp | Leu | Ser | Asn | Ala | Gly | Ala | Asn | Val | Val | Asp |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |
| Glu | Ser | Val | Val | Val | Asp | Asn | Asn | Ile | Val | Thr | Ser | Arg | Val | Pro | Asp |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |
| Asp | Leu | Asp | Asp | Phe | Asn | Arg | Glu | Ile | Val | Lys | Lys | Leu | Glu | Ala |     |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |

&lt;210&gt; 6265

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6265

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Asp | Leu | Thr | Met | Lys | Gln | Leu | Met | Ile | Arg | Asn | Leu | Lys | Leu | Arg | Thr |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Trp | Thr | Leu | Ile | Ile | Tyr | Ala | Leu | Leu | Leu | Leu | Phe | Phe | Pro | Ile | Tyr |  |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |  |
| His | Leu | Leu | Asn | Lys | Asp | Thr | Pro | Leu | Tyr | Ser | Ile | Ile | Ser | Gly | Pro |  |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |  |
| Ile | Gly | Leu | Ile | Leu | Thr | Met | Ile | Cys | Leu | Ile | Asp | Ile | Gly | His | Leu |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Phe | Arg | Val | Asn | Arg | Arg | Leu | Arg | Gly | Ser | Ser | Tyr | Tyr | Phe | Phe |     |  |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |  |
| Tyr | Ser | Leu | Pro | Val | Ser | Lys | Arg | Asp | Leu | Leu | Asn | Ala | Asn | Tyr | Met |  |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |  |
| Thr | Cys | Ile | Leu | Leu | Thr | Phe | Ile | Gly | Glu | Leu | Ile | Ile | Ser | Leu | Tyr |  |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Gly | Tyr | Tyr | Thr | Ser | Thr | Ile | Lys | Thr | Asp | Ser | Ile | Tyr | Phe | Ser | Thr |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |
| Thr | Phe | Ser | Phe | Ile | Val | Gly | Asn | Phe | Phe | Ser | Ile | Pro | Ile | Ala | Phe |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |
| Ser | Lys | Ser | Thr | Glu | Arg | Lys | Asp | Arg | Asp | Ile | Pro | Tyr | Ile | Ala | Tyr |  |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |     |  |
| Ile | Val | Gly | Ile | Met | Val | Val | Leu | Pro | Phe | Thr | Leu | Ser | Val | Ile | Phe |  |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |  |
| Ile | Leu | Ile | Asn | Tyr | Leu | Thr | His | Asn | Asp | Ser | His | Ile | Pro | Met | Ile |  |
|     |     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |     |  |
| Tyr | Ser | Tyr | Phe | Leu | Asn | Tyr | Gly | Leu | Leu | Val | Val | Ser | Ser | Ile | Phe |  |
|     | 195 |     |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |  |
| Leu | Val | Ile | Asn | Tyr | Leu | Ile | Gln | Ile | Lys | Lys | Ile | Lys | Tyr |     |     |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |

&lt;210&gt; 6266

&lt;211&gt; 466

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6266

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| Phe | Phe | Tyr | Ile | Leu | Glu | Leu | Thr | Lys | Asp | Cys | Asn | Gly | Glu | Val | Val |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Glu | Phe | Met | Lys | Lys | Phe | Asn | Ile | Lys | His | Ser | Phe | Met | Leu | Thr | Gly |  |



465

&lt;210&gt; 6267

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6267

Gln Ala Tyr Ile Ser Lys Leu Ile Ile Asp Leu Lys Ile Ser Phe Leu  
 1 5 10 15  
 Ile Phe His Leu Val Ser Ile Val Ile Lys Asn Leu Ile Lys Ile Cys  
 20 25 30  
 Asn Tyr Ile His Ile Thr Thr Tyr Val Glu Lys Asp Arg Thr Met Asn  
 35 40 45  
 Leu Phe  
 50

&lt;210&gt; 6268

&lt;211&gt; 41

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6268

Val Phe Asn Ile Glu Lys Val Trp Ile Val His Pro His Ser Met Thr  
 1 5 10 15  
 Asn Tyr Ser Leu Ile Leu Phe Leu Asn Asn Pro Asn Lys Pro Asn Pro  
 20 25 30  
 Val Ser Asn Ile Ile Lys Ala Gly Phe  
 35 40

&lt;210&gt; 6269

&lt;211&gt; 608

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6269

Ile Asn Asn Ile Thr Ile Val Ile Phe Ala Ser Ile Val Tyr Tyr Lys  
 1 5 10 15  
 Tyr Leu Lys Glu Gly Val Glu Met Ala Lys Leu Leu Ile Met Ser Ile  
 20 25 30  
 Val Ser Phe Cys Phe Ile Phe Leu Leu Leu Phe Phe Arg Tyr Ile  
 35 40 45  
 Leu Lys Arg Tyr Phe Asn Tyr Met Leu Asn Tyr Lys Val Trp Tyr Leu  
 50 55 60  
 Thr Leu Leu Ala Gly Leu Ile Pro Phe Ile Pro Ile Lys Phe Ser Phe  
 65 70 75 80  
 Phe Lys Phe Asn Asn Leu Asn Asn Gln Glu Pro Thr Val Glu Ser Asn  
 85 90 95  
 Ser His Asn Leu Asn Pro Asn Ile Asn Thr Thr Lys Pro Val His Glu  
 100 105 110  
 Phe Thr Thr Asp Ile His Lys Phe Asn Trp Asp Ser Ile Asp Asn Ile  
 115 120 125  
 Cys Thr Val Ile Trp Ile Val Leu Val Ile Ile Leu Ser Phe Lys Phe  
 130 135 140  
 Leu Asn Ser Leu Leu Tyr Leu Lys Tyr Leu Lys Lys Gln Ser Leu Tyr  
 145 150 155 160

Leu Asn Glu Lys Glu Lys Asp Lys Ile Asn Lys Ile Leu Phe Asn His  
 165 170 175  
 Gln Tyr Lys Arg Asn Ile Val Ile Arg Lys Ala Glu Ser Ile His Ser  
 180 185 190  
 Pro Ile Thr Phe Trp Tyr Gly Lys Tyr Ile Ile Leu Ile Pro Ser Leu  
 195 200 205  
 Tyr Phe Lys Ser Ile Asn Asp Lys Lys Leu Lys Tyr Ile Ile Leu His  
 210 215 220  
 Glu Tyr Ala His Ala Lys Asn Arg Asp Thr Leu His Leu Ile Ile Phe  
 225 230 235 240  
 His Ile Phe Ser Ile Ala Met Ser Tyr Asn Pro Leu Ile Gln Ile Val  
 245 250 255  
 Lys Arg Lys Met Ile His Asp Asn Glu Val Glu Ala Asp Arg Phe Val  
 260 265 270  
 Leu Asn Asn Ile Asn Lys Asn Glu Phe Lys Ser Tyr Ala Glu Ala Ile  
 275 280 285  
 Met Asp Ser Val Leu Lys Thr Ser Phe Phe Asn Lys Asn Ile Leu Ser  
 290 295 300  
 His Ser Phe Asn Gly Lys Lys Ser Leu Leu Lys Arg Arg Leu Ile Asn  
 305 310 315 320  
 Ile Lys Glu Gly Asn Leu Lys Lys Gln Ser Lys Leu Ile Leu Ile Phe  
 325 330 335  
 Ile Cys Ile Phe Thr Phe Phe Ile Met Ile Ile Gln Ser Gln Phe Leu  
 340 345 350  
 Met Gly Gln Ser Leu Thr Asp Tyr Asn Tyr Lys Lys Pro Leu Gln Ser  
 355 360 365  
 Asp Tyr Gln Ile Leu Asp Glu Ser Lys Asn Phe Gly Ser Asn Ser Gly  
 370 375 380  
 Ser Phe Val Met Tyr Ser Met Lys Lys Asp Lys Tyr Tyr Ile Tyr Asn  
 385 390 395 400  
 Glu Lys Glu Ser Arg Lys Arg Tyr Ser Pro Asp Ser Thr Tyr Lys Ile  
 405 410 415  
 Tyr Leu Ala Leu Phe Gly Leu Asp Arg His Ile Ile Ser Asp Lys Asn  
 420 425 430  
 Ser Arg Met Ser Trp Asn His Asn His Tyr Pro Phe Asp Ser Trp Asn  
 435 440 445  
 Lys Asp Gln Asp Leu Asn Thr Ala Ile Gln Asn Ser Val Asn Trp Tyr  
 450 455 460  
 Phe Glu Arg Ile Ser Asn Gln Leu Ser Lys Asn Tyr Thr Ser Asp Gln  
 465 470 475 480  
 Leu Lys Gln Leu Asn Tyr Gly Asn Lys Asn Leu Gly Ser Tyr Lys Ala  
 485 490 495  
 Tyr Trp Leu Glu Asp Ser Leu Lys Ile Ser Asn Leu Glu Gln Val Ile  
 500 505 510  
 Val Leu Lys Asn Met Met Glu Gln Asn Asn His Phe Ser Lys Asn Glu  
 515 520 525  
 Lys Lys Gln Leu Ser Ser Ser Ser Leu Leu Ile Arg Lys Asn Glu Asn Tyr  
 530 535 540  
 Glu Leu Tyr Gly Lys Thr Gly Thr Gly Ile Val Asn Gly Lys Tyr Asn  
 545 550 555 560  
 Asn Gly Trp Phe Val Gly Tyr Val Ile Thr Asn His Asp Lys Tyr Tyr  
 565 570 575  
 Phe Ser Thr His Leu Ser Asp Glu Lys Ala Ser Gly Glu Asn Ala Lys  
 580 585 590  
 Phe Ile Asn Glu Lys Ile Leu Lys Glu Met Gly Val Leu Asn Gly Gln  
 595 600 605



<210> 6270  
 <211> 44  
 <212> PRT  
 <213> S.epidermidis

<400> 6270

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Leu | Leu | Leu | Thr | Phe | Gln | His | Arg | Ala | Gly | Val | Ser | Pro | Tyr | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Pro | Tyr | Gly | Leu | Ala | Glu | Thr | Cys | Val | Phe | Asp | Lys | Gln | Ser | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Pro | Ile | His | Cys | Gly | Ser | Ser | Gly | Arg | Glu | Pro |     |     |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |

<210> 6271  
 <211> 355  
 <212> PRT  
 <213> S.epidermidis

<400> 6271

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Lys | Asn | Ile | Arg | Arg | Asp | Tyr | Lys | Met | Gln | Lys | Val | Arg | Ser | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Met | Thr | His | Arg | Gly | Ser | His | Tyr | Asp | Leu | Gly | Val | Lys | Thr | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Trp | Leu | Gln | Thr | Thr | Pro | Leu | Leu | Lys | Asn | Arg | Asn | Lys | Glu | Trp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Arg | Lys | Arg | Ile | Pro | Arg | Phe | Asp | Ile | Asp | Val | Lys | Glu | Thr | Tyr | Asp |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Phe | Gln | Ile | Tyr | Ser | Pro | Gln | Ile | Trp | Glu | Glu | Ile | Ile | Gly | Met |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Gln | Asp | Val | Leu | Asn | Leu | Pro | Thr | Lys | Gln | Met | Ile | Leu | Asn | Phe | Gly |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| His | Tyr | Arg | Phe | Thr | Asp | Leu | Lys | Asp | Ser | Gly | Cys | Thr | Val | Tyr | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | Arg | Asp | Phe | Leu | Val | Arg | Asn | Tyr | Asp | Tyr | His | Pro | Ala | Thr | Tyr |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asp | Gly | Arg | Tyr | Leu | Leu | Phe | Gln | Pro | Asn | Asp | Gly | Gly | Leu | Ser | Gln |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ile | Gly | Pro | Thr | Ser | Arg | Val | Thr | Gly | Arg | Met | Asp | Gly | Met | Asn | Glu |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Tyr | Gly | Leu | Val | Met | Ala | Tyr | Asn | Phe | Met | His | Arg | Lys | Lys | Pro | Ala |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Asn | Gly | Phe | Val | Cys | Tyr | Met | Val | Gly | Arg | Leu | Ile | Leu | Glu | Asn | Cys |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Lys | Asn | Val | Thr | Glu | Ala | Ile | Lys | Phe | Leu | Lys | Glu | Val | Pro | His | Arg |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ser | Ser | Phe | Ser | Tyr | Ile | Leu | Met | Asp | Arg | His | Ser | Asn | Tyr | Ala | Ile |
|     | 210 |     |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |
| Val | Glu | Val | Thr | Pro | Arg | Ser | Ile | Asp | Val | Arg | Tyr | Glu | His | Ile | Cys |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Thr | Asn | His | Phe | Glu | Leu | Leu | Thr | His | Glu | Asn | Arg | Asn | Tyr | Thr | Arg |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Glu | Ser | Lys | Glu | Arg | Leu | Asn | Arg | Val | Ile | Asn | Lys | Thr | Thr | Pro | Ser |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Thr | Asn | Lys | Asp | Ile | Ala | Phe | Lys | Leu | Phe | Asn | Asp | Pro | Gln | Tyr | Glu |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |

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<210> 6272
<211> 128
<212> PRT
<213> S.epidermidis
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```
<210> 6273
<211> 460
<212> PRT
<213> S.epidermidis
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|            |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 6273 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Leu        | Arg | Ile | Phe | Phe | Val | Ile | Pro | Phe | Thr | Cys | Tyr | Asn | Tyr | Ser | Ser |
| 1          |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala        | Asn | Trp | Arg | Arg | Lys | Arg | Met | Arg | Gln | Trp | Thr | Ala | Thr | His | Met |
|            |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala        | Lys | Leu | Ala | Arg | Lys | Ala | Ser | Ile | Ala | Val | Gly | Lys | Lys | Gly | Thr |
|            |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asp        | Leu | Pro | Gly | Gln | Ile | Ala | Arg | Arg | Val | Asp | His | Asn | Ile | Leu | Arg |
|            | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Lys        | Leu | Ala | Lys | Gln | Val | Asp | Asp | Ile | Val | Phe | Ile | Ser | Gly | Thr | Asn |
| 65         |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     | 80  |     |
| Gly        | Lys | Thr | Thr | Thr | Ser | Asn | Leu | Ile | Gly | His | Thr | Leu | Lys | Lys | Asn |
|            |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gln        | Ile | Asn | Ile | Ile | His | Asn | Asn | Glu | Gly | Ala | Asn | Met | Ala | Ala | Gly |
|            |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile        | Thr | Ser | Ala | Phe | Ile | Met | Gln | Ser | Ser | Lys | Asn | Thr | Asn | Ile | Ala |
|            |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |

```

Ile Ile Glu Ile Asp Glu Gly Ser Ile Pro Arg Val Leu Asn Glu Val
 130          135          140
Thr Pro Ser Met Met Val Phe Thr Asn Phe Phe Arg Asp Gln Met Asp
145          150          155          160
Arg Phe Gly Glu Ile Asp Ile Met Val Asp Asn Ile Ala Lys Ser Ile
          165          170          175
Ser Asn Lys Gly Ile Lys Leu Leu Leu Asn Ala Asp Asp Pro Phe Val
          180          185          190
Ser Arg Leu Lys Ile Ala Ser His Ser Ile Val Tyr Tyr Gly Met Lys
          195          200          205
Lys Phe Ala His Asp Phe Glu Gln Ser Thr Met Asn Glu Ser Lys Tyr
          210          215          220
Cys Pro Asn Cys Gly Arg Leu Leu Gln Tyr Asp Tyr Ile His Tyr Asn
225          230          235          240
Gln Ile Gly His Tyr His Cys Glu Cys Gly Phe Lys Arg Glu Glu Pro
          245          250          255
Thr Tyr Glu Val Ser Ser Phe Asp Ala Ser Pro Phe Leu Lys Met Ile
          260          265          270
Ile Asn Gln Ser Glu Phe Asn Met Lys Ile Ala Gly Asp Phe Asn Ser
          275          280          285
Tyr Asn Ala Ile Ala Ala Tyr Thr Val Leu Arg Glu Leu Gly Leu Asn
          290          295          300
Asp Asp Ala Ile Arg Lys Gly Phe Glu Thr Tyr Thr Ser Asp Asn Gly
305          310          315          320
Arg Met Gln Tyr Phe Ser Lys Asn Lys Lys Glu Ala Met Ile Asn Leu
          325          330          335
Ala Lys Asn Pro Ala Gly Met Asn Ala Ser Leu Ser Val Gly Glu Gln
          340          345          350
Ile Asp Asp Lys Lys Ile Tyr Val Ile Ser Leu Asn Asp Asn Ala Ala
          355          360          365
Asp Gly Arg Asp Ile Ser Trp Ile Tyr Asp Ala Asp Phe Glu Lys Leu
          370          375          380
Ala Thr Gln Asp Ile Glu Ala Ile Ile Val Ser Gly Thr Arg Ala Glu
          385          390          395          400
Glu Leu Gln Leu Arg Leu Lys Leu Ala Glu Val Glu Val Pro Ile Lys
          405          410          415
Val Glu Lys Asp Ile Tyr Lys Ala Thr Ala Leu Thr Met Lys Tyr Ser
          420          425          430
Ser Phe Thr Val Ala Ile Pro Asn Tyr Thr Ser Leu Thr Pro Met Leu
          435          440          445
Glu Gln Leu Asn Arg Ser Phe Glu Gly Gly Gln Ser
          450          455          460

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&lt;210&gt; 6274

&lt;211&gt; 41

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6274

```

Tyr Asn Ile Ile His Lys Trp Leu Ile Lys Tyr Cys Phe Tyr Lys Leu
1          5          10          15
Ile Pro Leu Tyr Ser Phe His Phe Tyr Leu Phe Ser Arg Leu Ile Ser
          20          25          30
Lys Leu Arg His Ser Phe Leu Ile Leu
          35          40

```

<210> 6275  
 <211> 101  
 <212> PRT  
 <213> S.epidermidis

<400> 6275

```

Ser Asp Leu Ile Lys Tyr Leu Asp Gln Ile Tyr Glu Ile Lys Ser Asp
1      5      10      15
Ile Ile Ile Ile Lys Ile Ile Asp Lys His Gln Phe Ser Leu Ala Glu
20      25      30
Ser Thr Lys Ser Leu Asn His Leu Ile Phe Leu Phe Leu Tyr Ile Tyr
35      40      45
Ala Tyr Ile Ile Ile Ala Arg Ser Ile Ile Ile Phe Ile Asn Leu Met
50      55      60
Leu Leu Leu Ser Thr Phe Phe Asn Phe Ser Val Gly Leu Gln Lys Ser
65      70      75      80
Ile Asn Thr Val Tyr Glu Leu Ser Asn Ile Tyr Val Lys Asn Lys Gly
85      90      95
Ile Ile Lys Lys Arg
100

```

<210> 6276  
 <211> 285  
 <212> PRT  
 <213> S.epidermidis

<400> 6276

```

Cys Val Ile Ile Tyr Val Arg Lys Thr Phe Glu Tyr Arg Ser Arg Asp
1      5      10      15
Ser Lys Met Pro Lys Val Thr Lys Ile Glu Val Gln Lys Lys Asn Lys
20      25      30
Glu Arg Phe Asn Leu Phe Leu Asp Gly Glu Phe Glu Met Gly Ile Asp
35      40      45
Ile Asp Thr Leu Val Lys Phe Asn Leu Lys Lys Asp Gln Ile Leu Glu
50      55      60
Pro Ser Asp Met Gln Asn Ile Gln Glu Tyr Asp His Tyr Arg Arg Gly
65      70      75      80
Val Asn Leu Ala Ile Gln Tyr Leu Ser Tyr Lys Lys Arg Thr Glu Arg
85      90      95
Glu Val Ile Gln Tyr Leu Glu Lys Asn Asp Ile Gln Ser Asn Ala Ile
100      105      110
Gln Asp Val Ile Asp Tyr Cys Tyr Lys Glu Lys Phe Ile Asp His Glu
115      120      125
Asp Tyr Ala Glu Ser Leu Lys Asn Thr Met Ile His Thr Thr Asp Lys
130      135      140
Gly Pro Glu Ile Tyr Arg Gln Lys Leu Tyr Gln Leu Gly Ile Glu Val
145      150      155      160
Thr Ile Ile Glu Lys Tyr Val Glu Ala Tyr Glu Gln Gln Gln Pro Leu
165      170      175
Asp Asp Val Ile Lys Val Ala Glu Lys Val Met Lys Ser Lys Lys Gly
180      185      190
Pro Glu Ala Lys Val Lys Gln Lys Val Thr Gln Ser Leu Leu Gln Lys
195      200      205
Gly Tyr Lys Phe Glu Thr Ile Gln Leu Val Met Asn Glu Ile Asp Phe
210      215      220
Ser Gln Asp Glu Glu Thr Leu Asp His Leu Leu Gln Arg Asp Leu Glu

```

225                      230                      235                      240  
 Lys Val Tyr Asn Lys Asn Cys Arg Lys Tyr Asp Ser Asp Lys Ser Val  
                                  245                      250                      255  
 Ile Lys Thr Ile Glu Ala Leu Met Arg Lys Gly Tyr Asn Tyr Asp Lys  
                                  260                      265                      270  
 Ile Lys Ser Lys Leu Glu Glu Ser Gly Ile Ser Asn Glu  
                                  275                      280                      285

<210> 6277

<211> 193

<212> PRT

<213> S.epidermidis

<400> 6277

Arg Lys Ile Ile Glu Arg Asn Glu Ile Met Val Gln Asn Ala Phe Val  
 1                      5                      10                      15  
 Ala Leu Asp Phe Glu Thr Ala Asn Ser Lys Arg Thr Ser Ile Cys Ser  
                                  20                      25                      30  
 Val Gly Met Val Lys Val Ile Asp Asn Gln Ile Thr Glu Ser Phe His  
                                  35                      40                      45  
 Thr Leu Val Asn Pro Phe Asp Tyr Phe Thr Glu Thr Asn Ile Thr Val  
                                  50                      55                      60  
 His Gly Ile His Pro Glu Asp Val Gln Asp Ala Pro Gly Phe Lys His  
 65                      70                      75                      80  
 Val Tyr Pro Tyr Met Leu Lys Phe Ile Asp Gln Leu Pro Val Val Ala  
                                  85                      90                      95  
 His Asn Ala Ala Phe Asp Met Asn Val Leu His Gln Ser Leu Lys Ser  
                                  100                      105                      110  
 His Asn Ile Asp Thr Pro Ser Leu Thr Tyr Phe Cys Ser Tyr Gln Leu  
                                  115                      120                      125  
 Ala Lys Arg Thr Ile Asn Ala Tyr Arg Tyr Gly Leu Lys His Leu Met  
                                  130                      135                      140  
 Asn His Tyr His Leu Asp Phe His Gly His His Asp Ala Leu Asn Asp  
 145                      150                      155                      160  
 Ala Lys Ala Cys Ala Met Ile Thr Tyr Arg Leu Leu Lys His Tyr Asp  
                                  165                      170                      175  
 Asp Leu Gln Ser Met Leu Ser Ile Tyr Gly Lys Asn Leu Lys Asp Lys  
                                  180                      185                      190  
 Gly

<210> 6278

<211> 381

<212> PRT

<213> S.epidermidis

<400> 6278

Ile Met Ile Ile Ser Asn Lys Ser Pro Ile Ser Ile Asn Asn Asp Pro  
 1                      5                      10                      15  
 Trp Glu Ala Tyr Asn Asp Ile Leu Glu His Asn Gln Leu Thr Leu Ser  
                                  20                      25                      30  
 Asn Ile Glu Phe Thr Thr Thr Asn Leu Cys Asn Met Arg Cys Ser His  
                                  35                      40                      45  
 Cys Ala Val Gly Tyr Thr Leu Gln Thr Lys Asp Pro Asp Pro Leu Pro  
                                  50                      55                      60  
 Met Asp Ile Ile Tyr Arg Arg Leu Asp Glu Ile Pro Asn Leu Arg Thr

```

65          70          75          80
Leu Ser Ile Thr Gly Gly Glu Pro Met Phe Ser Lys Lys Ser Ile Lys
      85          90          95
Asn Val Val Lys Pro Leu Leu Lys Tyr Ala Lys His Arg Gly Ile Tyr
      100          105          110
Val Gln Met Asn Ser Asn Leu Thr Leu Pro Gln Asp Arg Tyr Leu Asp
      115          120          125
Ile Ala Glu Tyr Ile Asp Val Met His Ile Ser His Asn Trp Gly Thr
      130          135          140
Ile Gln Glu Phe Thr Asp Val Gly Phe Gly Ala Met Arg Lys Gln Pro
145          150          155          160
Pro Leu Lys Ala Lys Leu Lys Leu Tyr Glu Gln Met Leu Glu Asn Ser
      165          170          175
Ser Thr Leu Ser Asp Gln Gly Met Phe Val Ser Ala Glu Thr Met Leu
      180          185          190
Asn Gln Ser Thr Val Pro Tyr Leu Ser Lys Ile His Asn Glu Val Val
      195          200          205
Asn Asp Met Lys Cys Ser Arg His Glu Ile His Pro Met Tyr Pro Ser
      210          215          220
Asp Phe Ala Ser Gln Leu Asn Val Leu Ser Leu Lys Glu Met Lys Glu
225          230          235          240
Ala Ile His His Leu Leu Asp Ile Arg Asp Glu Asn Thr Trp Met Leu
      245          250          255
Phe Gly Thr Leu Pro Ile Tyr Pro Cys Leu Asn Asp Glu Tyr Asp Gln
      260          265          270
His Leu Leu Gln Arg Leu Arg Lys Ser Lys Asn Val Thr Met Arg Asn
      275          280          285
Asp Pro Asp Gly Arg Ser Arg Leu Asn Val Asn Val Phe Thr Gly Asp
290          295          300
Val Ile Val Thr Asp Phe Gly Asp Glu Asn Gly Thr Ile Ser Asn Ile
305          310          315          320
Gln Lys Asp Lys Leu Thr Asp Val Phe Asn Gln Trp Leu Asn Thr Asp
      325          330          335
Leu Ala Gln Ser Leu Asn Cys His Cys Ala Glu Tyr Gln Cys Leu Gly
      340          345          350
Pro Asn Val Leu Val Lys Asn Met Tyr Tyr Pro Asn Thr Asp Phe Lys
      355          360          365
Lys Lys Glu Gln Ile Met His Gln His Gln Ile Phe Ser
      370          375          380

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&lt;210&gt; 6279

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6279

```

Asn His Lys Ile Gly Thr Ile Leu Arg Phe Tyr Phe Tyr Tyr Phe His
1          5          10          15
Asn Asn Leu Ile Ser Asn Phe Asn Ser Ile Ser Ile His Tyr Ser Asn
      20          25          30
Ser Phe Tyr Ile Ile His Ile Lys Leu Ile Thr Arg Asn Lys Lys Arg
      35          40          45
Leu Phe Asn Ile Phe Thr Leu Phe Ile Phe Ser
      50          55

```

&lt;210&gt; 6280

<211> 52  
 <212> PRT  
 <213> S.epidermidis

<400> 6280

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Leu | Lys | Ile | Ser | Thr | Lys | Thr | Cys | Lys | Asn | Thr | Ala | Ser | Cys | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| His | Asn | His | Thr | Cys | Lys | Gly | Phe | Val | Trp | Leu | Asn | Ile | Thr | Asn | Ile |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Asn | Val | Ile | Asn | Ile | Gly | His | Asn | Ile | Val | Lys | Gly | Asn | Glu | Cys |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | Ile | Pro | Leu |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 50  |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6281

<211> 479

<212> PRT

<213> S.epidermidis

<400> 6281

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Val | Glu | Ile | Met | His | Phe | Glu | Thr | Val | Ile | Gly | Leu | Glu | Val | His |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Val | Glu | Leu | Lys | Thr | Asp | Ser | Lys | Met | Phe | Ser | Pro | Ser | Pro | Ala | His |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Phe | Gly | Ala | Glu | Pro | Asn | Ser | Asn | Thr | Asn | Val | Ile | Asp | Leu | Ala | Tyr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Gly | Val | Leu | Pro | Val | Val | Asn | Arg | Arg | Ala | Val | Asp | Trp | Ala | Met |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg | Ala | Ser | Met | Ala | Leu | Asn | Met | Asp | Ile | Ala | Thr | Asn | Ser | Lys | Phe |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Asp | Arg | Lys | Asn | Tyr | Phe | Tyr | Pro | Asp | Asn | Pro | Lys | Ala | Tyr | Gln | Ile |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Gln | Phe | Asp | Gln | Pro | Ile | Gly | Glu | Asn | Gly | Tyr | Ile | Asp | Ile | Glu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Asp | Gly | Glu | Thr | Lys | Arg | Ile | Gly | Ile | Thr | Arg | Leu | His | Met | Glu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Glu | Asp | Ala | Gly | Lys | Ser | Thr | His | Lys | Asp | Gly | Tyr | Ser | Leu | Val | Asp |
|     |     | 130 |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |
| Leu | Asn | Arg | Gln | Gly | Thr | Pro | Leu | Ile | Glu | Ile | Val | Ser | Glu | Pro | Asp |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Ile | Arg | Ser | Pro | Lys | Glu | Ala | Tyr | Ala | Tyr | Leu | Glu | Lys | Leu | Arg | Ser |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ile | Ile | Gln | Tyr | Thr | Gly | Val | Ser | Asp | Cys | Lys | Met | Glu | Glu | Gly | Ser |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Leu | Arg | Cys | Asp | Ala | Asn | Ile | Ser | Leu | Arg | Pro | Tyr | Gly | Gln | Lys | Glu |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Phe | Gly | Thr | Lys | Thr | Glu | Leu | Lys | Asn | Leu | Asn | Ser | Phe | Asn | Tyr | Val |
|     |     | 210 |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Lys | Lys | Gly | Leu | Glu | Tyr | Glu | Glu | Lys | Arg | Gln | Glu | Glu | Glu | Leu | Leu |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Asn | Gly | Gly | Glu | Ile | Gly | Gln | Glu | Thr | Arg | Arg | Phe | Asp | Glu | Ser | Thr |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Gly | Lys | Thr | Ile | Leu | Met | Arg | Val | Lys | Glu | Gly | Ser | Asp | Asp | Tyr | Arg |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Tyr | Phe | Pro | Glu | Pro | Asp | Ile | Val | Pro | Leu | Tyr | Val | Asp | Glu | Asp | Trp |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     |     | 285 |     |     |

Lys Ala Arg Val Arg Glu Thr Ile Pro Glu Leu Pro Asp Glu Arg Lys  
 290 295 300  
 Ala Lys Tyr Val Asn Asp Leu Gly Leu Pro Glu Tyr Asp Ala His Val  
 305 310 315 320  
 Leu Thr Leu Thr Lys Glu Met Ser Asp Phe Phe Glu Gly Ala Ile Asp  
 325 330 335  
 His Gly Ala Asp Val Lys Leu Thr Ser Asn Trp Leu Met Gly Gly Val  
 340 345 350  
 Asn Glu Tyr Leu Asn Lys Asn Gln Val Glu Leu Lys Asp Thr Gln Leu  
 355 360 365  
 Thr Pro Glu Asn Leu Ala Gly Met Ile Lys Leu Ile Glu Asp Gly Thr  
 370 375 380  
 Met Ser Ser Lys Ile Ala Lys Lys Val Phe Pro Glu Leu Ala Glu Asn  
 385 390 395 400  
 Gly Gly Asp Ala Lys Gln Ile Met Glu Asp Lys Gly Leu Val Gln Ile  
 405 410 415  
 Ser Asp Glu Ala Thr Leu Leu Lys Phe Val Thr Asp Ala Leu Asp Asn  
 420 425 430  
 Asn Pro Gln Ser Ile Glu Asp Tyr Lys Asn Gly Lys Gly Lys Ala Met  
 435 440 445  
 Gly Phe Leu Val Gly Gln Ile Met Lys Ala Ser Lys Gly Gln Ala Asn  
 450 455 460  
 Pro Gln Lys Val Asn Ser Leu Leu Lys Gln Glu Leu Asp Asn Arg  
 465 470 475

&lt;210&gt; 6282

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6282

Phe Gly Val Ile Leu Met Ile His Val Ala Phe Val Cys Leu Gly Asn  
 1 5 10 15  
 Ile Cys Arg Ser Pro Met Ala Glu Ala Ile Met Arg Gln Arg Leu Gln  
 20 25 30  
 Glu Arg Gly Ile Ser Asp Ile Lys Val His Ser Arg Gly Thr Gly Arg  
 35 40 45  
 Trp Asn Leu Gly Glu Pro Pro His Asn Gly Thr Gln Lys Ile Leu Gln  
 50 55 60  
 Lys Tyr His Ile Pro Tyr Asp Gly Met Val Ser Glu Leu Phe Glu Pro  
 65 70 75 80  
 Asp Asp Asp Phe Asp Tyr Ile Ile Ala Met Asp Gln Ser Asn Val Asp  
 85 90 95  
 Asn Ile Lys Gln Ile Asn Pro Asn Leu Gln Gly Gln Leu Phe Lys Leu  
 100 105 110  
 Leu Glu Phe Ser Asn Met Glu Glu Ser Asp Val Pro Asp Pro Tyr Tyr  
 115 120 125  
 Thr Asn Asn Phe Glu Gly Val Phe Glu Met Val Gln Ser Ser Cys Asp  
 130 135 140  
 Asn Leu Ile Asp Tyr Ile Val Lys Asp Ala Asn Leu Lys Glu Arg  
 145 150 155

&lt;210&gt; 6283

&lt;211&gt; 359

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis



&lt;400&gt; 6283

Gly Glu Ser Met Thr Glu Arg Arg Ile Ile His Ile Asp Met Asp Tyr  
 1 5 10 15  
 Phe Phe Ala Gln Val Glu Met Arg Asp Asn Pro Lys Leu Lys Gly Lys  
 20 25 30  
 Pro Val Ile Val Gly Gly Lys Ala Ser His Arg Gly Val Val Ser Thr  
 35 40 45  
 Ala Ser Tyr Glu Ala Arg Ala Tyr Gly Val His Ser Ala Met Pro Met  
 50 55 60  
 Thr Gln Ala His Lys Leu Cys Pro Asn Gly Tyr Tyr Val Thr Ser Arg  
 65 70 75 80  
 Phe Asp Thr Tyr Arg Glu Val Ser Gly Gln Ile Met Lys Ile Phe Arg  
 85 90 95  
 Ser Tyr Thr Glu Leu Val Glu Pro Met Ser Leu Asp Glu Ala Tyr Leu  
 100 105 110  
 Asp Ile Thr His Leu Val Arg Pro Asp Leu Pro Ala Ser Thr Ile Ala  
 115 120 125  
 Asn Tyr Ile Arg Arg Asp Ile Tyr Glu Val Thr Ser Leu Thr Ala Ser  
 130 135 140  
 Ala Gly Val Ser Tyr Asn Lys Phe Leu Ala Lys Leu Ala Ser Gly Met  
 145 150 155 160  
 Asn Lys Pro Asn Gly Leu Thr Val Ile Asp Tyr Asn Asn Val His Glu  
 165 170 175  
 Ile Leu Met Gln Leu Asp Ile Gly Asp Phe Pro Gly Val Gly Lys Ala  
 180 185 190  
 Ser Lys Lys Lys Met His Gln His Ile Tyr Thr Gly Gln Asp Leu  
 195 200 205  
 Tyr Asn Lys Asp Glu Phe Glu Leu Ile Arg Leu Phe Gly Lys Arg Gly  
 210 215 220  
 Arg Gly Leu Tyr Asn Lys Ala Arg Gly Ile Asp His Asn Glu Val Lys  
 225 230 235 240  
 Ala Ser Arg Val Arg Lys Ser Val Gly Thr Glu Arg Thr Phe Ser Thr  
 245 250 255  
 Asp Val Asn Asp Asp Asp Val Ile Leu Arg Lys Ile Arg Glu Leu Ser  
 260 265 270  
 Gly Lys Thr Ala Glu Arg Leu Asn Lys Ile Gln Lys Ser Gly Lys Thr  
 275 280 285  
 Val Thr Val Lys Ile Lys Thr Tyr Gln Tyr Glu Thr Ile Ser Lys Gln  
 290 295 300  
 Lys Ser Leu Arg Asp Pro Ile Arg Thr Glu Thr Asp Ile Tyr Asn Ile  
 305 310 315 320  
 Ala Tyr Thr Leu Tyr Asn Asp Leu Lys Asp Pro Glu Ile Pro Ile Arg  
 325 330 335  
 Leu Ile Gly Val Thr Val Gly Ser Leu Glu Gln Ser Asp Phe Lys Asn  
 340 345 350  
 Leu Thr Ile Tyr Asp Phe Ile  
 355

&lt;210&gt; 6284

&lt;211&gt; 45

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6284

Phe Ser Lys Ile Phe Cys Leu Ala Thr Ser Tyr Ser Ser Val Thr Ser

1                                5                                10                                15  
 Val Arg Leu Pro Ser Ala Leu Arg Ser Leu Thr Ser Val Phe Gly Met  
                               20                                25                                30  
 Gly Thr Gly Val Thr Ser Leu Pro Leu Ser Pro Asp Lys  
                               35                                40                                45

<210> 6285  
 <211> 56  
 <212> PRT  
 <213> S.epidermidis

<400> 6285  
 Met Lys His Leu Thr Lys Ile Phe Val Gly Leu Ala Ile Val Leu Phe  
 1                                5                                10                                15  
 Ile Val Gly Tyr Tyr Leu Gln Ala Thr Asp His Asp Ser Gln Gly Ile  
                               20                                25                                30  
 Lys Leu Leu Leu Ala Ala Ile Met Phe Met Ile Cys Ala Phe Ile Asn  
                               35                                40                                45  
 Arg His Asn Glu Arg Lys Lys Lys  
                               50                                55

<210> 6286  
 <211> 144  
 <212> PRT  
 <213> S.epidermidis

<400> 6286  
 Ile Ser Phe Val Leu Pro Val Ser Gly Asn Leu Ser Cys Thr Ser Leu  
 1                                5                                10                                15  
 Leu Leu Ser Phe Leu Glu Val Val Val Ile Ser Ser Ser Leu Ser Phe  
                               20                                25                                30  
 Leu Val Ile Phe Val Ser Phe Ser Ser Leu Pro Leu Phe Gly Ile Thr  
                               35                                40                                45  
 Gly Leu Phe Ser Ser Leu Ser Phe Phe Lys Val Phe Val Ile Phe Phe  
                               50                                55                                60  
 Ser Leu Ser Phe Phe Gly Val Phe Val Ser Ser Ser Phe Ser Thr Leu  
 65                                70                                75                                80  
 Pro Leu Leu Gly Ile Thr Gly Phe Phe Ser Ser Leu Ser Phe Phe Gly  
                               85                                90                                95  
 Val Phe Met Ser Phe Phe Ser Leu Ser Phe Phe Gly Val Phe Val Ser  
                               100                                105                                110  
 Leu Asp Ser Phe Ser Ser Leu Ser Phe Phe Ser Val Phe Val Ser Ser  
                               115                                120                                125  
 Ser Phe Ser Phe Leu Val Ile Cys Val Phe Val Thr Glu Val Phe Ala  
                               130                                135                                140

<210> 6287  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

<400> 6287  
 Thr Gln Val Val Ile Ser Lys Ile Ser Phe Thr Tyr Gln Asn Ser Val  
 1                                5                                10                                15  
 Phe Tyr His Leu Phe Asn Ala Ile Lys Lys Thr Val Glu Lys Val Lys  
                               20                                25                                30

Asn Phe Asn Asn Ser Leu Asn Gln  
35 40

<210> 6288  
<211> 300  
<212> PRT  
<213> S.epidermidis

<400> 6288  
Ala Leu Asn Val Gly Lys Ile Ser Ile Ser Val Phe Leu Lys Leu Leu  
1 5 10 15  
Asn Thr Leu Lys Arg Trp Arg Met Lys Met Ser Arg Leu Gln Asp Val  
20 25 30  
Val Val Asn Glu Met Lys Val Lys Lys Gln Ile Asp Ser Val Glu Glu  
35 40 45  
Ile Gln Glu Ile Lys Gln Phe Ile Lys Ala Tyr Val Lys Ser His Ser  
50 55 60  
Phe Ile Gln Thr Leu Val Leu Gly Ile Ser Gly Gly Gln Asp Ser Thr  
65 70 75 80  
Leu Thr Gly Lys Leu Ala Gln Leu Ala Val Asn Glu Leu Lys Glu Glu  
85 90 95  
Gly Arg Asn Cys Lys Phe Ile Ala Val Lys Leu Pro Tyr Gly Val Gln  
100 105 110  
Gln Asp Ala His Glu Val Glu Asp Ala Leu Glu Phe Ile Asn Pro Asp  
115 120 125  
Thr Thr Tyr Thr Val Asn Ile Lys Pro Ala Val Asp Gln Ser Val Gln  
130 135 140  
Ser Leu Ser Glu Ala Gly Ile Lys Leu Thr Asp Phe Gln Lys Gly Asn  
145 150 155 160  
Glu Lys Ala Arg Glu Arg Met Lys Val Gln Phe Ser Ile Ala Ser Asn  
165 170 175  
Thr Gln Gly Ile Val Leu Gly Thr Asp His Ser Ala Glu Asn Ile Thr  
180 185 190  
Gly Phe Tyr Thr Lys Tyr Gly Asp Gly Ala Ala Asp Ile Ala Pro Ile  
195 200 205  
Phe Gly Leu Asn Lys Arg Gln Gly Lys Gln Leu Leu Ala Tyr Leu Gly  
210 215 220  
Ala Pro Lys His Leu Tyr Glu Lys Val Pro Thr Ala Asp Leu Glu Asp  
225 230 235 240  
Asp Lys Pro Gln Leu Pro Asp Glu Glu Ala Leu Gly Val Ser Tyr His  
245 250 255  
Asp Ile Asp Asp Tyr Leu Glu Gly Lys Glu Ile Pro Gly Thr Ala Arg  
260 265 270  
Glu Thr Ile Glu Lys His Tyr Val Arg Asn Ala His Lys Arg Glu Leu  
275 280 285  
Ala Tyr Thr Arg Tyr Ser Trp Pro Lys Tyr Asn Lys  
290 295 300

<210> 6289  
<211> 281  
<212> PRT  
<213> S.epidermidis

<400> 6289  
Ile Val Gly Val Lys Met Ile Asp Asn Leu Ile Val Tyr Ile Lys Asn  
1 5 10 15

Leu Pro His Leu Phe Ser Phe Cys Thr Gln Arg Leu Lys Gln Thr Trp  
                   20                  25                  30  
 Lys Trp Phe Ala Ile Ser Leu Ile Ile Gly Leu Val Ile Ile Leu Ala  
                   35                  40                  45  
 Leu Glu Gly Phe Phe Asn Phe Asn His Thr Thr Asp Ile Val Gln Val  
                   50                  55                  60  
 Arg Trp Leu Phe Arg Ile Ser Ser Phe Ile Ile Phe Ser Ile Ile Ile  
 65                  70                  75                  80  
 Gln Ser Ile Tyr Ile Ala Tyr Lys Tyr Tyr Ile Arg Asp Phe Val Val  
                   85                  90                  95  
 Met Lys Ser Phe His Ile Ser Ala Val Thr Pro Thr Ile Val Ile Ala  
                   100                  105                  110  
 Met Leu Gly Leu Ile Thr Ile Leu Ile Leu Gly Ile Val Ile Ile Ile  
                   115                  120                  125  
 Leu Lys Pro Val Asn Phe Glu Ala Ser Ile Leu Ser Phe Leu Tyr Tyr  
                   130                  135                  140  
 Leu Val Ile Leu Ala Ile Phe Ile Ser Val Thr Ser Ile Ile Leu Gly  
 145                  150                  155                  160  
 Leu Leu Ser Tyr Ala Ile Lys His Val Lys Leu Ile Phe Ile Ile Val  
                   165                  170                  175  
 Ser Ala Ile Ser Phe Phe Met Val Pro Ile Thr Tyr Ile Pro Asn Thr  
                   180                  185                  190  
 Asn Leu Asn Val Val Asn His Ile Met Met Leu Asn Pro Leu Tyr Tyr  
                   195                  200                  205  
 Phe Val Asn Gly Ser Ser Gln Ala Ile Val Phe Gly Thr Ile Ser Met  
                   210                  215                  220  
 Ser Asn Leu Pro Tyr His Leu Tyr Ile Ile Ile Leu Ile Gly Ile Ile  
 225                  230                  235                  240  
 Cys Val Ile Asn Tyr Ala Leu Val Arg His Ile Ala Phe Asp Lys Tyr  
                   245                  250                  255  
 Gln Asn Gln Ser Asn Gln Lys Asn Tyr Ser Lys Lys Asn Lys Glu Lys  
                   260                  265                  270  
 Glu Cys Leu Asn Val Lys Leu Asp Lys  
                   275                  280

&lt;210&gt; 6290

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6290

His Gln Cys Leu Asn Asn Leu Ile Ala His Leu Lys Glu Gly Asn Arg  
 1                  5                  10                  15  
 Lys Met Asn Glu Leu Thr Val Tyr His Phe Met Ser Asp Lys Leu Asn  
                   20                  25                  30  
 Leu Tyr Ser Asp Ile Gly Asn Ile Met Ala Leu Lys Gln Arg Ala Lys  
                   35                  40                  45  
 Lys Arg Asn Ile Lys Ile Asn Val Lys Glu Ile Asn Glu Thr Glu Gly  
                   50                  55                  60  
 Val Thr Phe Asp Asp Cys Asp Ile Phe Phe Ile Gly Gly Gly Ser Asp  
 65                  70                  75                  80  
 Arg Glu Gln Ala Leu Ala Thr Lys Glu Leu Ser Lys Ile Lys Thr Ser  
                   85                  90                  95  
 Leu Lys Asn Ala Ile Glu Asp Gly Met Pro Gly Leu Thr Ile Cys Gly  
                   100                  105                  110  
 Gly Tyr Gln Phe Leu Gly His Lys Tyr Ile Thr Pro Asp Gly Thr Glu

115 120 125  
 Leu Glu Gly Leu Gly Val Leu Asp Phe Tyr Thr Glu Ser Lys Lys Glu  
 130 135 140  
 Arg Leu Thr Gly Asp Ile Ile Ile Glu Ser Asp Thr Phe Gly Thr Ile  
 145 150 155 160  
 Val Gly Phe Glu Asn His Gly Gly Arg Thr Tyr His Pro Tyr Gly Thr  
 165 170 175  
 Leu Gly Arg Val Thr Tyr Gly Tyr Gly Asn Asn Asp Asn Asp Arg Lys  
 180 185 190  
 Glu Gly Ile His Tyr Lys Asn Leu Leu Gly Ser Tyr Leu His Gly Pro  
 195 200 205  
 Ile Leu Pro Lys Asn His Glu Ile Thr Asp Tyr Leu Leu Glu Lys Ala  
 210 215 220  
 Cys Glu Arg Lys Gly Ile Leu Phe Glu Pro Lys Lys Ile Asp Asn Thr  
 225 230 235 240  
 Glu Glu Glu Ala Ala Lys Gln Val Leu Ile Lys Arg Ala Lys Glu Asn  
 245 250 255  
 Lys Lys

<210> 6291  
 <211> 118  
 <212> PRT  
 <213> S.epidermidis

<400> 6291  
 Ile Gln Ile Val Ile Gln Ile Gln Ile Val Ile Gln Ile Gln Thr Val  
 1 5 10 15  
 Thr Gln Ile Gln Ile Val Thr Gln Ile Val Thr Gln Ile Gln  
 20 25 30  
 Thr Val Ile Gln Thr Gln Ile Val Thr Gln Ile Gln Thr Val Ile Gln  
 35 40 45  
 Thr Gln Ile Val Ile Gln Ile Gln Ile Val Ile Gln Ile Gln Thr Val  
 50 55 60  
 Ile Gln Ile Gln Ile Val Ile Gln Thr Leu Val Gln Val Gln Val Arg  
 65 70 75 80  
 Val His Ile Pro Glu Lys Asn Leu Val Thr Leu Lys Glu Ile Gln Ile  
 85 90 95  
 Asp Leu Leu Lys Asp Ile Arg Ile Asn Pro Lys Gly Leu Asn Thr Ile  
 100 105 110  
 Lys Gln Ile Lys Thr Ile  
 115

<210> 6292  
 <211> 205  
 <212> PRT  
 <213> S.epidermidis

<400> 6292  
 Lys Asn Lys Val Leu Thr Phe Leu Arg Arg Ser Met Met Lys Leu Gln  
 1 5 10 15  
 His Ile Thr Lys Lys Tyr Gly Gln Asn Thr Val Leu Asp Asp Ile Asp  
 20 25 30  
 Phe Asp Phe Gly Glu Ser Gln Ile Val Gly Leu Ile Gly Lys Asn Gly  
 35 40 45  
 Val Gly Lys Thr Thr Leu Met Lys Val Met Asn Asn Asn Ile Ile Asn

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 50  |     | 55  |     | 60  |     |     |     |     |     |     |     |     |     |     |     |
| Tyr | Gln | Gly | Lys | Val | Asp | Met | Pro | Lys | Ser | Glu | Asn | Val | Gly | Tyr | Leu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ile | Glu | His | Pro | Lys | Leu | Tyr | Gly | Asn | Lys | Thr | Gly | Leu | Phe | Asn | Leu |
|     |     |     |     | 85  |     |     |     |     |     | 90  |     |     |     | 95  |     |
| Lys | Leu | Phe | Ala | Gln | Val | Leu | Gly | Asp | Gly | Phe | Asp | Lys | Glu | Tyr | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asn | His | Ile | Ile | Glu | Ala | Phe | Gly | Met | Lys | Pro | Tyr | Ile | Lys | Lys | Lys |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Val | Asn | Lys | Tyr | Ser | Met | Gly | Met | Lys | Gln | Lys | Leu | Ser | Ile | Ala | Val |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ser | Leu | Met | Asn | Lys | Pro | Lys | Tyr | Leu | Ile | Leu | Asp | Glu | Pro | Thr | Asn |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gly | Met | Asp | Pro | Asp | Gly | Ser | Ile | Asp | Val | Leu | Lys | Thr | Ile | Gln | Ser |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Leu | Val | Gln | Gln | Leu | Glu | Met | Lys | Ile | Leu | Ile | Ser | Ser | His | Lys | Leu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Glu | Asp | Ile | Glu | Leu | Ile | Cys | Asp | Arg | Ala | Val | Phe | Pro |     |     |     |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |

<210> 6293  
 <211> 178  
 <212> PRT  
 <213> S.epidermidis

<400> 6293

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Leu | Gly | Val | Glu | Gln | Arg | Tyr | Ala | Val | Ile | Gln | Leu | Lys | Thr | Lys |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr | Asn | Ala | Thr | Phe | Leu | Lys | Ser | Glu | Phe | Asp | Lys | Trp | Glu | Gln | His |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Glu | Asp | Met | Tyr | Ala | Leu | His | Tyr | Pro | Arg | Met | Phe | Ile | Asp | Pro |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr | Thr | Met | Gln | Leu | Ser | Tyr | Glu | Ser | Asn | His | Ile | Glu | Asp | Leu | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Ser | Ile | Ile | Glu | Glu | Arg | Glu | Lys | Leu | Glu | Lys | Phe | Lys | His | Lys |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Ser | Asn | His | Asp | Leu | Lys | Lys | Phe | Asn | Ile | Ile | Leu | Ser | Asn | Tyr | Ser |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asp | Ser | Glu | Gln | Arg | Gln | Ile | Lys | Arg | Tyr | Gln | Arg | Asp | Asp | Ile | Leu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Asp | Glu | Ser | Leu | Ile | Leu | Arg | Ile | Cys | Glu | Asp | Ile | Ser | Asn | Ile |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asp | Ser | Lys | Asp | Lys | Asn | Asn | Arg | Asn | Thr | Ala | Ile | Gln | Glu | Glu | Ile |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Lys | Ala | Asp | Lys | Glu | Arg | Arg | Arg | Ala | Glu | Gly | Lys | Ala | Arg | Lys | Glu |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Arg | Ile | Lys | Ala | Arg | Met | Lys | Arg | Ala | Arg | Gln | Glu | Lys | Leu | Leu | Gln |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |

Ala Asn

<210> 6294  
 <211> 110  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6294

Lys Lys Ala Val Tyr Leu Met Asn Lys Lys Lys Met Ser Glu Met Ser  
 1 5 10 15  
 Glu Gln Glu Leu Arg His Glu Ile Gln Leu Phe Lys Glu Lys Met Arg  
 20 25 30  
 Lys Ala Glu Met Asn Gly Ile Met Asn Glu Tyr Asp Val Tyr Gln Ser  
 35 40 45  
 Lys Val Ile Ile Ala Glu Ser Tyr Leu Val Asp Arg Asn Lys Ile Glu  
 50 55 60  
 Pro Gly Lys Ile Tyr Lys Leu Asn Asp Gly Ser Lys Gln Tyr Phe Lys  
 65 70 75 80  
 Val Glu Arg Leu Lys Gly Val Phe Ala Trp Gly Phe Arg Ile Asn Ser  
 85 90 95  
 Ser Glu Pro Glu Glu Gly Leu Pro Leu Ala Leu Leu Lys Phe  
 100 105 110

&lt;210&gt; 6295

&lt;211&gt; 124

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6295

Gly Tyr Gln Val Phe Phe Arg Tyr Val Asn Pro Tyr Leu Asn Leu Tyr  
 1 5 10 15  
 Gln Ser Leu Asn His Tyr Leu Asn Leu Asn His Cys Leu Asn Leu Asn  
 20 25 30  
 His Tyr Leu Asn Leu Asn His Tyr Leu Ser Leu Asn His Cys Leu Asn  
 35 40 45  
 Leu Ser His Tyr Leu Ser Leu Asn His Cys Leu Asn Leu Ser His Tyr  
 50 55 60  
 Leu Asn Leu Ser His Tyr Leu Asn Leu Ser His Cys Leu Asn Leu Asn  
 65 70 75 80  
 His Tyr Leu Asn Leu Asn His Tyr Leu Asn Leu Ser His Tyr Leu Ser  
 85 90 95  
 Leu Asn His Tyr Leu Asn Met Cys His Phe Leu Ser His Tyr Leu Lys  
 100 105 110  
 Arg Tyr Leu Tyr Leu Asn His Tyr Pro Asn Ser Tyr  
 115 120

&lt;210&gt; 6296

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6296

Tyr Lys Leu Phe Asp Pro Leu Ile Tyr Gln Asp Arg Val Glu Phe Leu  
 1 5 10 15  
 Ile Ser Met Trp Gln Lys Leu Met Val Tyr Leu Phe Arg Leu Gln Ser  
 20 25 30  
 Asn Leu Tyr Ser Ile Ser Phe Leu Leu Thr Asn  
 35 40

&lt;210&gt; 6297

&lt;211&gt; 155

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6297

Glu Gly Leu Phe Val Phe Pro Leu Gly Leu Pro Gly Phe Phe Pro Val  
 1 5 10 15  
 Cys Glu Pro Leu Pro Glu Leu Val Pro Glu Ser Glu Ser Leu Ser Glu  
 20 25 30  
 Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu  
 35 40 45  
 Ser Glu Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu Ser Glu Ser Glu  
 50 55 60  
 Ser Leu Ser Glu Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu Ser Glu  
 65 70 75 80  
 Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu Ser Glu Ser Glu Ser Leu  
 85 90 95  
 Ser Glu Ser Lys Ser Leu Ser Glu Ser Glu Ser Leu Ser Lys Tyr Val  
 100 105 110  
 Ser Phe Ser Glu Ser Leu Phe Glu Thr Ile Ser Val Ser Lys Ser Leu  
 115 120 125  
 Ser Glu Phe Ile Leu Ile Pro Val Arg Leu Val Ser Phe Thr Arg Leu  
 130 135 140  
 Ile Ile Leu Leu Leu Ala Val Phe Leu Ser Ile  
 145 150 155

&lt;210&gt; 6298

&lt;211&gt; 46

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6298

Val Ile Ile Leu Tyr Asp Thr His Leu Phe Gly Arg Cys Ser Ile Met  
 1 5 10 15  
 Thr Trp Trp Gln Asp Gly Ile Ile Thr Leu Ile Thr Gly Gly Ile Leu  
 20 25 30  
 Ile Val Phe Arg Ile Trp Leu Glu Ile Lys Trp Lys Gly Lys  
 35 40 45

&lt;210&gt; 6299

&lt;211&gt; 315

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6299

Leu Lys Ile Leu Asn Lys Lys Arg Leu Ile Asp Met Lys Phe Thr Glu  
 1 5 10 15  
 Ser Glu Arg Leu Gln Gln Leu Ser Asn Glu Tyr Ile Leu Gly Gly Val  
 20 25 30  
 Asn Ser Pro Ser Arg Ser Tyr Lys Ala Val Gly Gly Gly Ala Pro Val  
 35 40 45  
 Val Met Lys Glu Gly His Gly Ala Tyr Leu Tyr Asp Val Asp Gly Asn  
 50 55 60  
 Lys Tyr Ile Asp Tyr Leu Gln Ala Tyr Gly Pro Ile Ile Thr Gly His  
 65 70 75 80  
 Ala His Pro His Ile Thr Glu Ala Ile Gln Asp Gln Ala Ala Lys Gly  
 85 90 95  
 Val Leu Tyr Gly Thr Pro Thr Glu Leu Glu Ile Asn Phe Ser Lys Lys  
 100 105 110



Leu Arg Glu Ala Val Pro Ser Leu Glu Lys Ile Arg Phe Val Asn Ser  
 115 120 125  
 Gly Thr Glu Ala Val Met Thr Thr Ile Arg Val Ala Arg Ala Tyr Thr  
 130 135 140  
 Lys Arg Asn Lys Ile Ile Lys Phe Ala Gly Ser Tyr His Gly His Ser  
 145 150 155 160  
 Asp Leu Val Leu Val Ala Ala Gly Ser Gly Pro Ser Gln Leu Gly Ser  
 165 170 175  
 Pro Asp Ser Ala Gly Val Pro Gln Ser Val Ala Gln Glu Val Ile Thr  
 180 185 190  
 Val Pro Phe Asn Asp Ile Glu Ser Tyr Arg Glu Ala Ile Asp Tyr Trp  
 195 200 205  
 Lys Asp Asp Ile Ala Ala Val Leu Val Glu Pro Ile Val Gly Asn Phe  
 210 215 220  
 Gly Met Val Met Pro Gln Pro Gly Phe Leu Glu Glu Val Tyr Lys Ile  
 225 230 235 240  
 Ser His Asp Asn Gly Thr Leu Val Ile Tyr Asp Glu Val Ile Thr Ala  
 245 250 255  
 Phe Ser Phe His Tyr Gly Ala Ala Gln Asp Leu Leu Gly Val Lys Pro  
 260 265 270  
 Tyr Leu Thr Ala Phe Gly Lys Ile Val Gly Gly Gly Leu Pro Ile Gly  
 275 280 285  
 Gly Tyr Gly Gly Arg Gln Asp Ile Met Glu His Val Ala Pro Phe Thr  
 290 295 300  
 Ser Ser Leu Ile Gln Gln Gly Thr Met Gly Gly  
 305 310 315

&lt;210&gt; 6300

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6300

Ile Tyr Ser Leu Ser Tyr Ser Asn Phe Asn Phe Tyr Leu Lys Lys Ser  
 1 5 10 15  
 Lys Glu Phe Val Thr Tyr His Ile Leu Ile Pro Asn Ile Ile Ile Lys  
 20 25 30  
 Ile Asn Leu Leu Arg Phe Gln Ile Tyr Ile Phe His His Cys Met Tyr  
 35 40 45  
 Leu Ile Leu Phe Tyr Lys Phe Cys Val Gln  
 50 55

&lt;210&gt; 6301

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6301

Pro Gln Pro Leu Glu Asn Asp Ile Tyr Tyr Arg Asp Ile Gln Met Leu  
 1 5 10 15  
 His Val Ser Leu Val Ser Leu Gln Thr Met Tyr Leu Tyr Ala His Phe  
 20 25 30  
 Ile Tyr Tyr Leu Asn Asn Lys Lys Val Leu Asn Leu Thr Phe Tyr Gln  
 35 40 45  
 Ser Leu Thr Asn Tyr Asp Asn Leu Ile Glu Tyr  
 50 55

<210> 6302  
 <211> 473  
 <212> PRT  
 <213> S.epidermidis

<400> 6302

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Lys | Lys | Leu | Ala | Phe | Tyr | Ile | Leu | Gly | Cys | Met | Arg | Ile | Phe | Lys |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Met | Asp | Asn | Lys | Ile | Glu | Lys | Ile | Leu | Glu | Asp | Ile | Asn | Lys | Leu |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Gln | Gly | Tyr | Lys | Val | Thr | Tyr | Gln | Tyr | Ala | Thr | Ala | Ile | Asn | Ile | Lys |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asp | Asn | Asn | Met | Asn | Pro | Trp | Phe | Glu | Lys | Ile | Glu | Glu | Ile | Leu | Leu |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn | Val | Lys | Gly | Val | Ile | Arg | Ile | Leu | Ser | Pro | Asp | Asn | Pro | Pro | Val |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Asn | Tyr | Asp | Tyr | Trp | Ile | Leu | Pro | Gly | Arg | Tyr | Lys | Arg | His | Thr | Lys |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Glu | Tyr | His | Glu | Lys | Leu | Glu | Lys | Phe | Leu | Glu | Lys | Phe | Ala | Thr | Asn |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Asn | Ile | Asn | Asp | Gly | Leu | Phe | Asp | Gln | Asn | Asn | Ile | His | Gly | Tyr |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Lys | Tyr | Lys | Lys | Tyr | Ile | Phe | Thr | Pro | His | Ile | Glu | Ile | Thr | His | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asn | Thr | Leu | Asn | Leu | Phe | Phe | Leu | Thr | Leu | Thr | Ile | Phe | Asn | Asn | Gly |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Thr | Phe | Val | Ile | Glu | Ile | Ile | Glu | Asp | Leu | Glu | Ser | Ile | Asn | Phe | Gly |
|     |     |     | 165 |     |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ser | Asp | Leu | Tyr | Ser | Thr | Phe | Ser | Cys | Val | Lys | Asp | Lys | Ile | Tyr | Pro |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Leu | Ile | Asn | Gln | Glu | Lys | Asn | Asn | Arg | Gln | Arg | Gln | Tyr | Gln | Phe | Tyr |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Gly | Asn | Arg | His | Cys | Lys | Asn | Ile | Arg | Asp | Val | Ser | Arg | Gln | Ile | Asn |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Arg | Ile | Ile | Lys | Ile | Asn | Ser | Lys | Asp | Ile | Phe | Glu | Tyr | Lys | Val | Ser |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Lys | Asn | Met | Gly | Phe | Glu | Val | Tyr | Tyr | Leu | Ala | Asn | Glu | Asn | Glu | Phe |
|     |     |     | 245 |     |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Thr | Asp | Asp | Pro | Phe | Tyr | Glu | Asp | Val | Lys | Ile | Gln | Glu | Trp | Leu | Val |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Asn | Ala | Pro | Ile | Phe | Ser | Phe | Glu | Gly | Lys | Ser | Lys | His | Phe | Arg | Gln |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Asp | Gly | Tyr | Ser | Asp | Asn | Tyr | Ile | Asn | Phe | Leu | Asn | Lys | Ala | Ser | Val |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Phe | Val | Val | Trp | Met | Asp | Glu | Gln | Glu | Glu | Asp | Val | Leu | Glu | Lys | Cys |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Ser | Gln | Met | Ala | Leu | Tyr | Phe | Asn | Ser | Ser | Ala | Asn | Phe | Phe | Phe | Leu |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Glu | Thr | Met | Leu | Asn | Glu | Leu | Gln | Leu | Tyr | Gly | Tyr | Gln | Gln | Tyr | Asn |
|     |     | 340 |     |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Leu | Asn | Gly | Lys | Lys | Glu | Ala | Leu | Tyr | Phe | Arg | Gln | Trp | Ile | Leu | Asn |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Phe | Lys | Arg | Ser | Ile | Ala | Ile | Ile | Tyr | Arg | Thr | Glu | Leu | Leu | Pro | Ser |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Leu | Tyr | Leu | Tyr | Leu | Tyr | Leu | Lys | Asn | Asn | Asn | Asp | Phe | Lys | Ser | Pro |

385                      390                      395                      400  
 Gln Tyr Ile Glu Glu Leu Asn Lys Glu Glu Leu Ser Leu Ile Glu Leu  
                                  405                      410                      415  
 Glu Gln Ser Tyr Lys Glu Glu Glu Arg Ser Glu Lys Leu Asn Lys Leu  
                                  420                      425                      430  
 Leu Leu Ile Ile Ser Leu Leu Ser Ile Phe Gln Val Val Glu Ile Phe  
                                  435                      440                      445  
 Phe Ser Asp Lys Asn Asn Ile Phe Asn Ile Ser Met Ile Leu Ile Met  
                                  450                      455                      460  
 Ile Leu Leu Glu Val Phe Arg Lys Arg  
 465                      470

<210> 6303

<211> 324

<212> PRT

<213> S.epidermidis

<400> 6303

Val Tyr Glu Phe Glu Gly Leu Thr Met Arg Lys Arg Ala Arg Ile Ile  
 1                      5                      10                      15  
 Tyr Asn Pro Thr Ser Gly Lys Glu Leu Phe Lys Arg Val Leu Pro Asp  
                                  20                      25                      30  
 Ala Leu Ile Lys Leu Glu Lys Ala Gly Tyr Glu Thr Ser Ala Tyr Ala  
                                  35                      40                      45  
 Thr Glu Lys Ile Gly Asp Ala Thr Phe Glu Ala Glu Arg Ala Leu Glu  
                                  50                      55                      60  
 Ser Glu Tyr Asp Leu Leu Ile Ala Ala Gly Gly Asp Gly Thr Leu Asn  
 65                      70                      75                      80  
 Glu Val Val Asn Gly Ile Ala Glu Gln Pro Asn Arg Pro Lys Leu Gly  
                                  85                      90                      95  
 Val Ile Pro Met Gly Thr Val Asn Asp Phe Gly Arg Ala Leu His Leu  
                                  100                      105                      110  
 Pro Ser Asp Ile Met Gly Ala Ile Asp Val Ile Ile Asp Gly His Thr  
                                  115                      120                      125  
 Thr Lys Val Asp Ile Gly Lys Met Asn Asn Arg Tyr Phe Ile Asn Leu  
                                  130                      135                      140  
 Ala Ala Gly Gly Lys Leu Thr Gln Val Ser Tyr Glu Thr Pro Ser Lys  
 145                      150                      155                      160  
 Leu Lys Ser Ile Val Gly Pro Phe Ala Tyr Tyr Ile Lys Gly Phe Glu  
                                  165                      170                      175  
 Met Leu Pro Gln Met Lys Ala Val Asp Val Arg Ile Glu Tyr Asp Asp  
                                  180                      185                      190  
 Asn Ile Phe Gln Gly Glu Ala Leu Leu Phe Leu Leu Gly Leu Thr Asn  
                                  195                      200                      205  
 Ser Met Ala Gly Phe Glu Lys Leu Val Pro Asp Ala Lys Leu Asp Asp  
 210                      215                      220  
 Gly Tyr Phe Thr Leu Ile Val Glu Lys Ala Asn Leu Ala Glu Leu  
 225                      230                      235                      240  
 Gly His Ile Met Thr Leu Ala Ser Arg Gly Glu His Thr Lys His Pro  
                                  245                      250                      255  
 Lys Val Ile Tyr Ala Lys Ala Lys Ser Ile Asn Ile Ser Ser Phe Thr  
                                  260                      265                      270  
 Asp Met Gln Leu Asn Val Asp Gly Glu Tyr Gly Gly Lys Leu Pro Ala  
                                  275                      280                      285  
 Asn Phe Leu Asn Leu Glu Gln His Ile Glu Ile Phe Thr Pro Lys Asp  
 290                      295                      300

Val Phe Asn Glu Glu Leu Leu Glu Asn Asp Thr Ile Thr Asp Ile Thr  
 305 310 315 320  
 Pro Asp Lys Gln

<210> 6304  
 <211> 41  
 <212> PRT  
 <213> S.epidermidis

<400> 6304  
 Ala Phe Pro Ser Lys Thr Leu Lys Lys Met Trp Lys Val Gly Cys Val  
 1 5 10 15  
 Glu Met Lys Lys Gln Cys Leu Leu Tyr Leu Tyr Val Ala Pro Leu Asp  
 20 25 30  
 Ile His Leu Gly Asn Val Asn Val His  
 35 40

<210> 6305  
 <211> 78  
 <212> PRT  
 <213> S.epidermidis

<400> 6305  
 Gly Gly Ile Ser Met Val His Glu Leu Gly Thr Val Gly Met Val Cys  
 1 5 10 15  
 Pro Phe Pro Leu Ile Glu Ala Gln Lys Lys Met Asn Gln Leu Asn Gln  
 20 25 30  
 Gly Asp Glu Leu Lys Ile Asp Phe Asp Cys Thr Gln Ala Thr Glu Ala  
 35 40 45  
 Leu Pro Asn Trp Ala Ala Glu Asn Gly Tyr Pro Val Thr Asn Tyr Glu  
 50 55 60  
 Gln Leu Asp Asp Ala Ser Trp Thr Ile Thr Ile Gln Lys Ala  
 65 70 75

<210> 6306  
 <211> 99  
 <212> PRT  
 <213> S.epidermidis

<400> 6306  
 Gly Ser Ile Pro Pro Thr Pro Pro Arg Lys Leu Ala Leu Thr Phe Gln  
 1 5 10 15  
 Arg Leu Leu Pro Ile Leu Tyr Lys Leu Cys Arg Ile Ser Ile Ser Gly  
 20 25 30  
 Tyr Ser Lys Ala Pro Arg Gly Leu Ser Val Leu Ser Arg Val Thr Cys  
 35 40 45  
 Ile Phe Thr Gly Thr Met Ile Ser Pro Ser Leu Ser Leu Arg Gln Cys  
 50 55 60  
 Pro Asn Arg Tyr Ala Phe Arg Ala Gly Arg Asn Leu Pro Asp Lys Glu  
 65 70 75 80  
 Phe Arg Tyr Leu Arg Thr Val Ile Val Thr Ala Ala Val Tyr Trp Gly  
 85 90 95  
 Phe Asp Ser

<210> 6307  
 <211> 47  
 <212> PRT  
 <213> S.epidermidis

<400> 6307  
 Arg Tyr Cys Thr Ser Pro Cys Leu Leu Val Asn Phe Ser Cys His Ile  
 1 5 10 15  
 Leu Ser Leu Leu Asn Lys Lys Gly Arg Ser Ala Thr His Tyr Ile Ile  
 20 25 30  
 Arg Tyr Leu Ile His Tyr Ile Arg Leu Leu Ile Cys Tyr Asn His  
 35 40 45

<210> 6308  
 <211> 154  
 <212> PRT  
 <213> S.epidermidis

<400> 6308  
 Lys Leu Ile Thr Ile His Asn Leu Asn Glu Met Asp Lys Phe Ala Gln  
 1 5 10 15  
 Ile Leu Val Lys His Leu Ser Ala Lys Asp Leu Ile Leu Leu Asn Gly  
 20 25 30  
 Asp Leu Gly Ala Gly Lys Thr Thr Leu Thr Gln Phe Ile Gly Lys Ala  
 35 40 45  
 Leu Gly Val Lys Arg Thr Ile Asn Ser Pro Thr Phe Asn Ile Ile Lys  
 50 55 60  
 Ser Tyr Lys Gly Ser Ser Ile Arg Leu His His Met Asp Cys Tyr Arg  
 65 70 75 80  
 Leu Glu Gly Glu Glu Asp Asp Leu Gly Phe Asp Glu Tyr Phe Glu Asp  
 85 90 95  
 Asn Ala Ile Ile Val Ile Glu Trp Ser Lys Phe Ile Lys Asp Phe Leu  
 100 105 110  
 Pro Pro Asn His Leu Thr Ile Asn Ile Ser Val Lys Asn Ala Asn Glu  
 115 120 125  
 Arg Gln Val Ser Ile Glu Thr His Gly Gln His Tyr Ala Leu Val Lys  
 130 135 140  
 Glu Ala Ile Leu Asn Glu Leu Ser Ser Asn  
 145 150

<210> 6309  
 <211> 82  
 <212> PRT  
 <213> S.epidermidis

<400> 6309  
 Asn Gly Gly Leu Leu Met Glu Arg Thr Ile His Phe Thr Leu Val Asp  
 1 5 10 15  
 Gln Val Ser Thr Leu Asn Arg Ile Thr Ser Ala Phe Val Arg Leu Gln  
 20 25 30  
 Cys Asn Ile Asp Glu Leu His Val Lys His Ser Asp Lys Glu Gly Ile  
 35 40 45  
 Ser Asn Met Lys Leu Lys Val Asn Ile Lys Asp Asp Asp Thr Phe Lys  
 50 55 60  
 Ile Val Leu Lys Lys Leu Ser Gln Gln Val Asn Val Leu Ser Val Lys  
 65 70 75 80

Ser Glu

&lt;210&gt; 6310

&lt;211&gt; 97

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6310

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Ser | Leu | Thr | Ala | Arg | Pro | Thr | Ser | Arg | Ala | Gly | Ser | Lys | Asp | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Ser | Asp | Pro | Val | Val | Pro | His | Gly | Arg | Ala | Ile | Ala | Gln | Arg | Ile |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Ala | Thr | Pro | Gly | Ile | Thr | Gly | Leu | Ser | Pro | Pro | Arg | Val | His | Ile |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Asp | Gly | Glu | Val | Trp | His | Leu | Asp | Val | Gly | Ser | Ser | His | Pro | Gly | Ala |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Val | Val | Gly | Pro | Lys | Gly | Trp | Ala | Val | Arg | Pro | Leu | Lys | Arg | Tyr | Ala |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Ser | Trp | Val | Gln | Asn | Val | Val | Arg | Gln | Phe | Gly | Pro | Tyr | Pro | Ser | Trp |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |

Ala

&lt;210&gt; 6311

&lt;211&gt; 424

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6311

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Thr | Val | Thr | Val | Arg | Thr | Lys | Val | Ser | Thr | Lys | Asp | Ile | Asp | Glu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Tyr | Leu | Arg | Leu | Lys | Asn | Ile | Val | Lys | Glu | Thr | Pro | Leu | Gln | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | His | Tyr | Leu | Ser | Gln | Lys | Tyr | Asn | Cys | Asn | Val | Tyr | Leu | Lys | Arg |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu | Asp | Leu | Gln | Trp | Val | Arg | Ser | Phe | Lys | Leu | Arg | Gly | Ala | Tyr | Asn |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Ile | Ser | Val | Leu | Ser | Asn | Glu | Glu | Lys | Asn | Lys | Gly | Ile | Thr | Cys |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Ala | Ser | Ala | Gly | Asn | His | Ala | Gln | Gly | Val | Ala | Tyr | Thr | Ala | Lys | Lys |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Leu | Asn | Leu | Lys | Ala | Val | Ile | Phe | Met | Pro | Val | Thr | Thr | Pro | Arg | Gln |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Lys | Ile | Asn | Gln | Val | Lys | Phe | Phe | Gly | Asp | Ser | Asn | Val | Glu | Ile | Val |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Ile | Gly | Asp | Thr | Phe | Asp | His | Cys | Leu | Ala | Gln | Ala | Leu | Asn | Tyr |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Thr | Lys | Gln | His | Lys | Met | Asn | Phe | Ile | Asp | Pro | Phe | Asn | Asn | Val | Tyr |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |     |
| Thr | Ile | Ala | Gly | Gln | Gly | Thr | Leu | Ala | Lys | Glu | Ile | Leu | Asn | Gln | Ala |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Glu | Lys | Glu | Asp | Lys | Thr | Phe | Asp | Tyr | Val | Phe | Ala | Ala | Ile | Gly | Gly |
|     |     |     | 180 |     |     |     | 185 |     |     |     |     |     | 190 |     |     |
| Gly | Gly | Leu | Ile | Ser | Gly | Val | Ser | Thr | Tyr | Phe | Lys | Ala | His | Ser | Pro |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |

His Thr Lys Ile Ile Gly Val Glu Pro Thr Gly Ala Ser Ser Met Tyr  
 210 215 220  
 Gln Ser Val Val Ile Asn His Ser Ile Val Thr Leu Glu Asn Ile Asp  
 225 230 235 240  
 Lys Phe Val Asp Gly Ala Ser Val Ala Arg Val Gly Asp Ile Thr Phe  
 245 250 255  
 Asp Ile Ala Lys Asp Lys Val Asp Asp Tyr Val Gln Val Asp Glu Gly  
 260 265 270  
 Ala Val Cys Ser Thr Ile Leu Asp Met Tyr Ser Lys Gln Ala Ile Val  
 275 280 285  
 Ala Glu Pro Ala Gly Ala Leu Ser Val Ser Ala Leu Glu Gln Tyr Lys  
 290 295 300  
 Lys Gln Ile Glu Asn Lys Thr Ile Val Cys Ile Val Ser Gly Gly Asn  
 305 310 315 320  
 Asn Asp Ile Asn Arg Met Lys Glu Ile Glu Glu Arg Ser Leu Leu Phe  
 325 330 335  
 Glu Glu Met Lys His Tyr Phe Ile Leu Asn Phe Pro Gln Arg Pro Gly  
 340 345 350  
 Ala Leu Arg Glu Phe Val Asn Asp Val Leu Gly Pro Gln Asp Asp Ile  
 355 360 365  
 Thr Lys Phe Glu Tyr Leu Lys Lys Thr Ser Gln Asn Thr Gly Thr Val  
 370 375 380  
 Ile Ile Gly Ile Gln Leu Lys His His Asp Asp Leu Ile Gln Leu Lys  
 385 390 395 400  
 Asp Arg Val Cys Gln Phe Asp Pro Ser Asn Ile Tyr Ile Asn Glu Asn  
 405 410 415  
 Lys Met Leu Tyr Ser Leu Leu Ile  
 420

<210> 6312

<211> 46

<212> PRT

<213> S.epidermidis

<400> 6312

Ile Asn Tyr Phe Ile Asn Glu Tyr Arg Lys Gln Leu Lys Ile Glu Asn  
 1 5 10 15  
 Lys Leu Ser Ile Gly Asn Val Arg Thr Tyr Gln Gln Asn Val Ser Lys  
 20 25 30  
 Leu Trp Val Ser Ser Glu Val Val Cys Gly Tyr Val Asn Lys  
 35 40 45

<210> 6313

<211> 173

<212> PRT

<213> S.epidermidis

<400> 6313

Met Asp Phe Leu Gln Gln Asn Trp Thr Asn Ile Leu Lys Ile Ile Val  
 1 5 10 15  
 Ser Leu Ile Ser Ile Val Thr Phe Ile Arg Val Phe Leu Tyr Glu Arg  
 20 25 30  
 Ser Arg Leu Lys Val Asn Ile Ile Gly Tyr Asp Gln Ile Glu Glu Tyr  
 35 40 45  
 Leu Asp Val Tyr Ile Ser Phe Ser Asn Ser Ser Lys Leu Pro Ile Ser  
 50 55 60

Ile Asn Glu Ile Gln Ile Phe His Lys Asn Thr Met Ile Gly Glu Ile  
 65 70 75 80  
 Glu Asn Phe Thr Glu Lys Ile Leu Gly Gln Thr Asp Gly Lys Ser Ile  
 85 90 95  
 Val Tyr Ser Asn Pro Met Pro Leu Asn Leu Asn Ser Tyr Ser Ser Asp  
 100 105 110  
 Lys Asp Leu Phe Arg Ile Lys Leu Val Glu Glu Leu Pro Leu Asn Lys  
 115 120 125  
 Thr Leu Thr Phe Lys Phe Ile Thr Thr Arg Lys Asn Ile Thr Tyr Lys  
 130 135 140  
 Ile Lys Asp Phe Lys Leu Pro Gln Tyr Arg Arg Ser Phe His Arg Lys  
 145 150 155 160  
 Leu Lys His His Lys Lys Val Ser Asn Lys Asn Lys Asp  
 165 170

<210> 6314  
 <211> 104  
 <212> PRT  
 <213> S.epidermidis

<400> 6314  
 Val Asp Ile Tyr Cys Asn Gly Arg Leu Lys Gln Met Thr Gln Glu Ile  
 1 5 10 15  
 Asn Cys Asn Phe Lys Ser His Ile Pro Arg Ile Met Thr Val Pro Gly  
 20 25 30  
 Ile Leu Leu Ile His Glu Asn Lys Leu Glu Phe Lys Ala Tyr Ser Gln  
 35 40 45  
 Asn Asn Asn Pro Phe Asn Ile Gln Phe Glu Leu Ser Ser Ile Val Arg  
 50 55 60  
 Tyr Arg Thr Ser Lys Gly Leu Leu Gly Asn Lys Leu Phe Ile Tyr Tyr  
 65 70 75 80  
 Ser Asp Gln Glu Trp Tyr Lys Phe Ser Asn Leu Ser Lys Ser Asp Leu  
 85 90 95  
 Asn Lys Leu Thr Lys Tyr Leu Tyr  
 100

<210> 6315  
 <211> 138  
 <212> PRT  
 <213> S.epidermidis

<400> 6315  
 Gly Val Thr Tyr Lys Met Lys Lys Ile Phe Ile Leu Leu Leu Ser Ser  
 1 5 10 15  
 Leu Leu Val Leu Ala Ala Cys Gly Lys Asn Tyr Glu Ile Ser Asp Ile  
 20 25 30  
 Thr Asn Lys Phe Lys Lys Glu Gly Leu Ser Val Glu Asn Leu Arg Lys  
 35 40 45  
 Met Lys Arg Glu Asp Phe Gly Met Ala Pro Met Lys Thr Glu Asn Ala  
 50 55 60  
 Lys Ile Phe Thr Val Ser Asp Asp Lys Asn Ala Arg Ile Leu Lys Phe  
 65 70 75 80  
 Lys Asn Glu Asp Asp Leu Lys Glu Met Lys Lys Tyr Tyr Glu Glu Leu  
 85 90 95  
 Gly Lys Ser Ser Ala Ala Phe Tyr Ser His Val Tyr Thr Lys Asp Arg  
 100 105 110



Phe Leu Ile Gln Met Asn Gly Asp Ile Asp Asp His Leu Phe Glu Lys  
                   115                  120                  125  
 Tyr Lys Lys Ala Met Asn Glu Ala Leu Asp  
           130                  135

<210> 6316  
 <211> 51  
 <212> PRT  
 <213> S.epidermidis

<400> 6316  
 Met Asn Tyr Leu Leu Ile Asp Thr Ser Asn Gln Pro Leu Ser Val Ala  
 1                  5                  10                  15  
 Ile Met Lys Asp Asn Glu Val Ile Ala Glu Lys Thr Thr Asp Ile Lys  
                   20                  25                  30  
 Lys Asn His Ser Val Gln Leu Met Pro Glu Ile Ala Glu Phe Leu Gln  
                   35                  40                  45  
 Lys Val Lys  
           50

<210> 6317  
 <211> 49  
 <212> PRT  
 <213> S.epidermidis

<400> 6317  
 Asn Ser His Leu Asp Tyr Leu Cys Arg Phe Ala Val Arg Ala Pro Val  
 1                  5                  10                  15  
 Ile Tyr Leu Glu Ala Phe Leu Gly Ser Val Lys Ser Thr Thr Arg Gly  
                   20                  25                  30  
 Asn Asn Phe Leu Ser Pro Ser Gln Leu Ser Leu Met Ser Ala Gly Phe  
                   35                  40                  45  
 Ala

<210> 6318  
 <211> 622  
 <212> PRT  
 <213> S.epidermidis

<400> 6318  
 Thr Tyr Gln Gln Leu Asn Lys Leu Leu Ser Phe Tyr Tyr Thr Arg Lys  
 1                  5                  10                  15  
 Asp Ser Asn Phe Arg Lys Val Leu Thr Ser Lys Cys Leu Ser Pro Ile  
                   20                  25                  30  
 Ser Ser Trp Met Gly Leu Asn Asn Val Pro Ile Phe Ile Gly Thr Phe  
                   35                  40                  45  
 Phe Tyr Phe Leu Asn Asn Tyr Met Gly Glu Arg Tyr Met Arg Ser Asp  
           50                  55                  60  
 Met Ile Lys Lys Gly Asp His Gln Ala Pro Ala Arg Ser Leu Leu His  
 65                  70                  75                  80  
 Ala Thr Gly Ala Phe Lys Gln Pro Thr Asp Met Asn Lys Pro Phe Val  
                   85                  90                  95  
 Ala Ile Cys Asn Ser Tyr Ile Asp Ile Val Pro Gly His Val His Leu  
                   100                  105                  110  
 Arg Glu Leu Ala Asp Ile Ala Lys Glu Ala Ile Arg Glu Ala Gly Ala



|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 565 |     |     |     |     | 570 |     |     |     |     | 575 |     |  |  |
| Glu | Glu | Glu | Leu | Tyr | Arg | Arg | Lys | Asn | Gln | Leu | Glu | Pro | Phe | Arg | Ala |  |  |
|     |     |     | 580 |     |     |     |     | 585 |     |     |     |     | 590 |     |     |  |  |
| Lys | Val | Lys | Thr | Gly | Tyr | Leu | Ala | Arg | Tyr | Thr | Ser | Leu | Val | Thr | Ser |  |  |
|     |     | 595 |     |     |     |     | 600 |     |     |     |     | 605 |     |     |     |  |  |
| Ala | Asn | Thr | Gly | Gly | Ile | Met | Gln | Val | Pro | Glu | Asn | Leu | Ile |     |     |  |  |
|     | 610 |     |     |     |     | 615 |     |     |     |     | 620 |     |     |     |     |  |  |

&lt;210&gt; 6319

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6319

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Ile | Thr | Thr | His | Tyr | Ala | Val | Ser | Tyr | Arg | Tyr | Leu | Ser | Ala | Cys | Ser |  |  |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |  |  |
| Thr | Lys | Tyr | Ser | Lys | Pro | Leu | Glu | Leu | Ile | Ser | Leu | Ile | Phe | Ile | Lys |  |  |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     | 30  |     |     |     |  |  |
| Lys | Leu | Ser | Ala | Tyr | Leu | Lys | Val | Val | Thr | Leu | Arg |     |     |     |     |  |  |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     |     |     |     |     |  |  |

&lt;210&gt; 6320

&lt;211&gt; 584

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6320

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Glu | Met | Ile | Lys | Met | Ser | Asn | Gln | Lys | Ser | Met | Val | Ser | Pro | His | Pro |  |  |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |  |  |
| Ser | Glu | His | Gln | Thr | Lys | Glu | Ser | Gln | Pro | Leu | Ile | Thr | Arg | Ser | Gly |  |  |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     | 30  |     |     |     |  |  |
| Ser | Gln | Leu | Leu | Val | Glu | Ala | Leu | Gln | Gln | Glu | Asp | Val | Asp | Phe | Ile |  |  |
|     |     | 35  |     |     |     | 40  |     |     |     | 45  |     |     |     |     |     |  |  |
| Phe | Gly | Tyr | Pro | Gly | Gly | Ala | Val | Leu | Pro | Leu | Tyr | Asp | Thr | Phe | Tyr |  |  |
|     | 50  |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |     |  |  |
| Asp | Gly | Lys | Ile | Lys | His | Ile | Leu | Ala | Arg | His | Glu | Gln | Gly | Ala | Thr |  |  |
| 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |     |  |  |
| His | Ala | Ala | Glu | Gly | Tyr | Ala | Arg | Val | Ser | Gly | Lys | Thr | Gly | Val | Val |  |  |
|     |     |     | 85  |     |     | 90  |     |     |     |     |     | 95  |     |     |     |  |  |
| Val | Val | Thr | Ser | Gly | Pro | Gly | Ala | Thr | Asn | Ala | Ile | Thr | Gly | Ile | Thr |  |  |
|     |     | 100 |     |     |     | 105 |     |     |     |     |     | 110 |     |     |     |  |  |
| Asp | Ala | Tyr | Ser | Asp | Ser | Leu | Pro | Leu | Val | Val | Phe | Thr | Gly | Gln | Val |  |  |
|     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |  |  |
| Ala | Thr | Pro | Gly | Ile | Gly | Lys | Asp | Ala | Phe | Gln | Glu | Ala | Asp | Leu | Leu |  |  |
|     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |     |  |  |
| Ser | Met | Thr | Thr | Pro | Ile | Thr | Lys | His | Asn | Tyr | Gln | Val | Lys | Lys | Ile |  |  |
|     | 145 |     |     | 150 |     |     |     |     | 155 |     |     |     |     |     | 160 |  |  |
| Glu | Asp | Ile | Pro | Arg | Ile | Val | His | Glu | Ala | Phe | His | Leu | Ala | Asn | Thr |  |  |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |  |  |
| Gly | Arg | Lys | Gly | Pro | Val | Val | Ile | Asp | Phe | Pro | Lys | Asp | Met | Gly | Val |  |  |
|     |     | 180 |     |     |     | 185 |     |     |     |     |     | 190 |     |     |     |  |  |
| Leu | Lys | Thr | Asp | Val | Glu | Leu | Thr | Lys | Asp | Ile | Asn | Ile | Pro | Gly | Tyr |  |  |
|     |     | 195 |     |     |     | 200 |     |     |     |     |     | 205 |     |     |     |  |  |
| Glu | Val | Asn | Ser | Ser | Pro | Asn | Lys | Glu | Asp | Ile | Asn | Lys | Leu | Ile | Tyr |  |  |
|     | 210 |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |     |  |  |
| Met | Ile | Lys | Glu | Ala | Lys | Lys | Pro | Leu | Ile | Leu | Ala | Gly | Ala | Gly | Ile |  |  |

225                      230                      235                      240  
 Asn His Ser Lys Ser Asn His Leu Leu Thr Glu Phe Val Thr Arg His  
                                  245                      250                      255  
 Gln Ile Pro Thr Val Thr Thr Leu Leu Gly Leu Gly Ala Val Pro Tyr  
                                  260                      265                      270  
 His His Pro Leu Phe Leu Gly Met Gly Gly Met His Gly Ser Tyr Ala  
                                  275                      280                      285  
 Ser Asn Met Ala Leu Thr Asn Cys Asp Leu Leu Ile Asn Leu Gly Ser  
                                  290                      295                      300  
 Arg Phe Asp Asp Arg Leu Ala Ser Lys Pro Asp Ala Phe Ala Pro Asn  
 305                      310                      315                      320  
 Ala Lys Val Val His Val Asp Ile Asp Pro Ser Glu Ile Asn Lys Val  
                                  325                      330                      335  
 Ile Asn Thr Asp Leu Gly Ile Val Ala Asp Cys Lys His Val Leu Glu  
                                  340                      345                      350  
 Asn Leu Cys His Glu Gln Val Leu Thr Ser Ser His Glu Glu Trp Asn  
                                  355                      360                      365  
 Asp Tyr Cys Ile Asn Asn Lys Ser Asn Tyr Pro Phe Lys Tyr Asp Glu  
                                  370                      375                      380  
 Asn Asp Lys Thr Phe Cys Lys Pro Gln Lys Ala Ile Glu Tyr Ile Gly  
 385                      390                      395                      400  
 Lys Val Thr Asn Gly Asn Ala Ile Val Thr Thr Asp Val Gly Gln His  
                                  405                      410                      415  
 Gln Met Trp Thr Ala Gln Phe Tyr Pro Phe Lys Asn Tyr Gly Gln Trp  
                                  420                      425                      430  
 Val Thr Ser Gly Gly Leu Gly Thr Met Gly Phe Gly Ile Pro Ser Ala  
                                  435                      440                      445  
 Ile Gly Ala Gln Leu Ala Glu Pro Glu Lys Thr Val Val Cys Phe Val  
                                  450                      455                      460  
 Gly Asp Gly Gly Phe Gln Met Thr Asn Gln Glu Met Ala Leu Leu Pro  
 465                      470                      475                      480  
 Glu Tyr Gly Leu Asn Val Lys Ile Val Leu Ile Asn Asn Gly Thr Leu  
                                  485                      490                      495  
 Gly Met Val Lys Gln Trp Gln Asp Lys Phe Phe Asn Lys Arg Phe Ser  
                                  500                      505                      510  
 His Ser Val Phe Asn Asp Gln Pro Asp Phe Met Lys Met Ala Glu Ala  
                                  515                      520                      525  
 Tyr Gly Ile Lys Gly Phe Leu Ile Asp Ser Pro Asp Lys Leu Glu Ser  
                                  530                      535                      540  
 Ser Ile Asp Glu Ala Phe Ala Tyr His Gly Pro Ala Leu Ile Glu Val  
 545                      550                      555                      560  
 Arg Ile Ser Pro Ile Glu Pro Val Asn Pro Met Val Pro Ser Gly Lys  
                                  565                      570                      575  
 Ser Asn His Glu Met Glu Gly Tyr  
                                  580

&lt;210&gt; 6321

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6321

Leu Glu Ile Lys Pro Ile Thr Ile Tyr Thr Gly Lys Thr Val Pro Leu  
 1                      5                      10                      15  
 Phe Tyr Asp Asn Ile Asp Thr Asp Gln Ile Ile Pro Lys Val His Leu  
                                  20                      25                      30

Lys Arg Val Ser Lys Ser Gly Phe Gly Pro Phe Ala Phe Asp Glu Trp  
           35                  40                  45  
 Arg Tyr Leu Pro Asp Gly Ser Asp Asn Pro Asp Phe Asn Pro Asn Lys  
           50                  55                  60  
 Pro Glu Tyr His Gly Ala Ser Ile Leu Ile Thr Gly Asp Asn Phe Gly  
 65                  70                  75                  80  
 Cys Gly Ser Ser Arg Glu His Ala Ala Trp Ala Leu Lys Asp Tyr Gly  
                   85                  90                  95  
 Phe Asn Ile Ile Ile Ala Gly Ser Phe Ser Asp Ile Phe Tyr Met Asn  
           100                  105                  110  
 Cys Thr Lys Asn Ala Met Leu Pro Ile Cys Leu Asn Gln Lys Glu Arg  
           115                  120                  125  
 Glu His Leu Ala Gln Phe Asp Glu Ile Thr Val Asp Leu Pro Asn Gln  
           130                  135                  140  
 Thr Val Ser Thr Val Ser Gln Ser Phe His Phe Asp Ile Asp Glu Thr  
 145                  150                  155                  160  
 Trp Lys Asn Lys Leu Ile His Gly Leu Asp Asp Ile Ala Ile Thr Leu  
                   165                  170                  175  
 Gln Phe Glu Asn Leu Ile Glu Lys Tyr Glu Lys Thr Phe  
           180                  185

<210> 6322  
 <211> 372  
 <212> PRT  
 <213> S.epidermidis

<400> 6322  
 Glu Phe Ala Lys Tyr Gly Pro Phe Tyr Tyr Asn Thr Leu Val Phe Ile  
 1                  5                  10                  15  
 Ser Glu Lys Gly Asp Lys Met Val Trp Thr Ile Ile Ser Gly Leu Val  
           20                  25                  30  
 Val Gly Ile Leu Leu Gly Phe Val Met Gln Arg Thr Arg Phe Cys Leu  
           35                  40                  45  
 Ala Gly Gly Phe Arg Asp Met Tyr Val Gln Lys Ser Asn Lys Met Phe  
           50                  55                  60  
 Tyr Ala Leu Leu Ile Ala Ile Thr Val Gln Ser Ile Gly Leu Leu Ile  
 65                  70                  75                  80  
 Leu Lys His Leu Asn Ile Ile Glu Val Pro Ala Glu Thr Phe Pro Val  
                   85                  90                  95  
 Ile Gly Thr Ile Leu Gly Ser Phe Ile Phe Gly Ile Gly Ile Val Leu  
           100                  105                  110  
 Ala Gly Gly Cys Ala Thr Gly Thr Trp Tyr Arg Ala Gly Glu Gly Leu  
           115                  120                  125  
 Ile Gly Ser Trp Val Ala Leu Ile Phe Tyr Ala Leu Thr Ser Ala Val  
           130                  135                  140  
 Thr Lys Thr Gly Val Leu Leu Pro Ile Met Asn Gln Ile Asn Lys Thr  
 145                  150                  155                  160  
 Thr Gln Val Asn Thr Ser Met Thr Ser Thr Gly Ile Pro Gln Trp  
                   165                  170                  175  
 Ile Leu Val Met Leu Leu Ile Leu Ile Thr Val Phe Leu Val Val Lys  
           180                  185                  190  
 Thr Ile Arg Lys Pro Lys Ile Met Val Pro Gln Leu Lys Gln Lys Tyr  
           195                  200                  205  
 Ser Gly Ile Arg His Tyr Leu Phe Glu Lys Arg Tyr His Pro Phe Val  
           210                  215                  220  
 Ala Gly Ile Ala Val Gly Phe Ile Ala Leu Leu Ala Trp Pro Met Ser



Ala Thr Asp Thr Ile Ala Phe Ala Ile His Lys Tyr Cys Ser Asp His  
                           245                          250                          255  
 Gln Gln Arg Phe Tyr Asn Cys Ser Ile Tyr Gly Phe Gly Gly Asp Pro  
                           260                          265                          270  
 Met Thr Gln Ile Val Ser Pro Val Ile Gln Thr Val Ser Tyr Asn Tyr  
                           275                          280                          285  
 Phe Glu Ala Gly Glu Gln Ala Leu Lys Glu Ile Asn Gln Leu Leu Lys  
                           290                          295                          300  
 Gly Glu Gln Thr Ala Leu Lys Ile Lys Ile Pro Ile Gln Leu Asn  
 305                          310                          315

<210> 6324

<211> 69

<212> PRT

<213> S.epidermidis

<400> 6324

Lys Leu Met Asn Lys Val Leu Gly Tyr Arg Lys Met Leu Gly Lys Thr  
 1                          5                          10                          15  
 Gln Gln Gln Met Ala Lys Glu Leu Asn Ile Ser Glu Gln Ser Tyr Arg  
                           20                          25                          30  
 Asn Arg Glu Lys Gly Lys Ile Asn Phe Lys Lys Asn Glu Met Ile Lys  
                           35                          40                          45  
 Phe Lys Ile Met Leu Leu Glu Lys Gly Leu Lys Asp Ile Thr Leu Asp  
                           50                          55                          60  
 Asp Ile Phe Phe Ser  
 65

<210> 6325

<211> 649

<212> PRT

<213> S.epidermidis

<400> 6325

Lys Gly Glu Asn Arg Met Ile Leu Leu Gln Leu Asn Asp Ile Ser Lys  
 1                          5                          10                          15  
 Ser Phe Asp Gly Glu Asp Ile Phe Thr Asp Val Asn Phe Glu Val Lys  
                           20                          25                          30  
 Thr Gly Glu Arg Ile Gly Val Val Gly Arg Asn Gly Ala Gly Lys Ser  
                           35                          40                          45  
 Thr Leu Met Lys Ile Ile Ala Gly Val Glu Asn Tyr Asp Ser Gly His  
                           50                          55                          60  
 Ile Ser Lys Ile Lys Asn Leu Thr Met Ser Tyr Leu Thr Gln Gln Met  
 65                          70                          75                          80  
 Thr Leu Asn Ser Glu Ala Thr Val Phe Glu Glu Met Ser Lys Pro Phe  
                           85                          90                          95  
 Glu His Ile Lys Lys Ile Glu Asn Leu Ile Lys Asp Glu Thr Asp Trp  
                           100                          105                          110  
 Leu Ala Arg Asn Gly Gln Asp Tyr Lys Ser Asp Glu Tyr Gln Ser His  
                           115                          120                          125  
 Ile Glu Lys Tyr Glu Thr Leu Thr Asn Arg Tyr Glu Gln Leu Asp Gly  
                           130                          135                          140  
 Tyr Gln Tyr Glu Ser Lys Ile Lys Thr Val Leu His Gly Leu Asn Phe  
 145                          150                          155                          160  
 Thr Glu Ser Asp Phe Asn Lys Pro Ile Asn Asp Phe Ser Gly Gly Gln  
                           165                          170                          175

Lys Thr Arg Leu Ser Leu Ala Gln Met Leu Leu Lys Glu Pro Asp Leu  
 180 185 190  
 Leu Leu Leu Asp Glu Pro Thr Asn His Leu Asp Met Glu Thr Thr Lys  
 195 200 205  
 Trp Leu Glu Asp Tyr Leu Lys Tyr Phe Lys Gly Ala Ile Val Ile Ile  
 210 215 220  
 Ser His Asp Arg Tyr Phe Leu Asp Lys Ile Val Thr Gln Val Tyr Asp  
 225 230 235 240  
 Val Ala Leu Gly Asn Val Lys His Tyr Val Gly Asn Tyr Glu Gln Phe  
 245 250 255  
 Ile Lys Gln Arg Asn Gln Tyr Tyr Glu Lys Arg Met Gln Glu Phe Glu  
 260 265 270  
 Lys Gln Gln Glu Glu Ile Lys Arg Leu Glu Thr Phe Val Glu Lys Asn  
 275 280 285  
 Ile Thr Arg Ala Ser Thr Ser Gly Met Ala Lys Ser Arg Arg Lys Thr  
 290 295 300  
 Leu Glu Lys Met Glu Arg Ile Asp Lys Pro Met Ile Asp Ala Arg Ser  
 305 310 315 320  
 Ala Asn Ile Gln Phe Gly Phe Asp Arg Asn Thr Gly Asn Asp Val Met  
 325 330 335  
 His Ile His Asp Leu Lys Ile Gly Tyr Asp Ser Pro Ile Thr Leu Pro  
 340 345 350  
 Ile Asn Leu Glu Val Phe Lys Gly Asp His Ile Ala Ile Ile Gly Pro  
 355 360 365  
 Asn Gly Val Gly Lys Thr Thr Leu Ile Lys Thr Ile Ala Glu Lys Gln  
 370 375 380  
 Asn Lys Leu Gly Gly Gln Ile Ile Phe Gly Ala Asn Leu Gln Ile Gly  
 385 390 395 400  
 Tyr Tyr Asp Gln Lys Gln Ala Glu Phe Lys Ser Asn Lys Thr Ile Leu  
 405 410 415  
 Asp Tyr Val Trp Asp Gln Tyr Pro His Met Asn Glu Lys Asp Val Arg  
 420 425 430  
 Ala Val Leu Gly Arg Phe Leu Phe Val Gln Glu Asp Val Lys Lys Ile  
 435 440 445  
 Ile Asn Asp Leu Ser Gly Gly Glu Lys Ala Arg Leu Gln Leu Ala Leu  
 450 455 460  
 Leu Met Leu Gln Arg Asp Asn Val Leu Ile Leu Asp Glu Pro Thr Asn  
 465 470 475 480  
 His Leu Asp Ile Asp Ser Lys Glu Met Leu Glu Gln Ala Leu Lys Asp  
 485 490 495  
 Phe Glu Gly Thr Ile Ile Phe Val Ser His Asp Arg Tyr Phe Ile Asn  
 500 505 510  
 Gln Leu Ala Asn Lys Val Phe Asp Leu Asn Ile Asn Gly Gly Gln Met  
 515 520 525  
 Phe Leu Gly Asp Tyr Gln Tyr Tyr Ile Glu Lys Thr Glu Glu Ala Ala  
 530 535 540  
 Ala Ile Lys Ala His Glu Thr Val Thr Gln Asn Phe Glu Asn Lys  
 545 550 555 560  
 Glu Ile Asn Gln Asp Ala Asn Thr Ser Thr Tyr Ile Ser Gln Lys Gln  
 565 570 575  
 Gln Lys Arg Gln Gln Arg Lys Leu Glu Arg Gln Ile Glu His Cys Glu  
 580 585 590  
 Arg Gln Ile Glu Glu Leu Glu Ala Gln Ile Ser His Ile Glu Glu Gln  
 595 600 605  
 Leu Thr Gln Pro Glu Val Phe Asn Asp Pro Leu Lys Ala Ser Lys Phe  
 610 615 620



Ala Asn Gln Lys Ser Asp Ile Glu Gln Lys Leu Glu Gln Ile Met Leu  
 625 630 635 640  
 Glu Trp Glu Lys Leu Gln Glu Lys Leu  
 645

<210> 6326

<211> 461

<212> PRT

<213> S.epidermidis

<400> 6326

Glu Glu Glu Lys Ile Met Gly Gln Thr Leu Phe Asp Lys Val Trp Lys  
 1 5 10 15  
 Lys His Val Leu His Gly Lys Glu Gly Glu Pro Gln Leu Leu Tyr Ile  
 20 25 30  
 Asp Leu His Leu Ile His Glu Val Thr Ser Pro Gln Ala Phe Glu Gly  
 35 40 45  
 Leu Arg Ile Gln Asn Arg Lys Leu Arg Arg Pro Asp Leu Thr Phe Ala  
 50 55 60  
 Thr Leu Asp His Asn Val Pro Thr Ile Asp Ile Phe Asn Ile Lys Asp  
 65 70 75 80  
 Glu Ile Ala His Lys Gln Ile Thr Thr Leu Gln Gln Asn Ala Lys Asp  
 85 90 95  
 Phe Gly Val His Ile Phe Asp Met Gly Ser Asp Glu Gln Gly Ile Val  
 100 105 110  
 His Met Val Gly Pro Glu Thr Gly Leu Thr Gln Pro Gly Lys Thr Ile  
 115 120 125  
 Val Cys Gly Asp Ser His Thr Ala Thr His Gly Ala Phe Gly Ala Ile  
 130 135 140  
 Ala Phe Gly Ile Gly Thr Ser Glu Val Glu His Val Phe Ala Thr Gln  
 145 150 155 160  
 Thr Leu Trp Gln Thr Lys Pro Lys Asn Leu Lys Ile Asn Ile Asn Gly  
 165 170 175  
 Ser Leu Pro Thr Gly Val Tyr Ala Lys Asp Ile Ile Leu Tyr Leu Ile  
 180 185 190  
 Asn Gln Tyr Gly Val Asp Phe Gly Thr Gly Tyr Ala Leu Glu Phe Thr  
 195 200 205  
 Gly Glu Thr Ile Lys Asn Leu Ser Met Glu Ala Arg Met Thr Ile Cys  
 210 215 220  
 Asn Met Ala Ile Glu Ala Gly Ala Lys Tyr Gly Leu Met Gln Pro Asp  
 225 230 235 240  
 Glu Thr Thr Phe Asp Tyr Val Lys Gly Arg Pro Tyr Ala Thr Asp Phe  
 245 250 255  
 Asp Ser Ser Met Ala Trp Trp Lys Lys Leu Tyr Ser Asp Asp Ala  
 260 265 270  
 Tyr Phe Asp Lys Val Ile Glu Leu Asp Val Thr Asn Leu Glu Pro Gln  
 275 280 285  
 Val Thr Trp Gly Thr Asn Pro Glu Met Gly Val Ser Phe Ser Asn Pro  
 290 295 300  
 Phe Pro Glu Ile Lys Asn Ala Asn Asp Gln Arg Ala Tyr Asp Tyr Met  
 305 310 315 320  
 Gly Leu His Pro Gly Gln Lys Ala Glu Asp Ile Lys Leu Gly Tyr Val  
 325 330 335  
 Phe Leu Gly Ser Cys Thr Asn Ala Arg Leu Ser Asp Leu Ile Glu Ala  
 340 345 350  
 Ser His Ile Ile Lys Gly Gln Gln Val His Pro Asn Ile Thr Ala Ile

```

      355              360              365
Val Val Pro Gly Ser Arg Thr Val Lys Lys Glu Ala Glu Ala Leu Gly
  370              375              380
Leu Asp Lys Leu Phe Lys Asp Ala Gly Phe Glu Trp Arg Glu Pro Gly
 385              390              395              400
Cys Ser Met Cys Leu Gly Met Asn Pro Asp Gln Val Pro Glu Gly Val
      405              410              415
His Cys Ala Ser Thr Ser Asn Arg Asn Phe Glu Gly Arg Gln Gly Lys
      420              425              430
Gly Ala Arg Thr His Leu Val Ser Pro Ala Met Ala Ala Ala Ala
      435              440              445
Ile Asn Gly Lys Phe Ile Asp Val Arg Lys Val Val Val
   450              455              460

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<210> 6327  
 <211> 110  
 <212> PRT  
 <213> S.epidermidis

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<400> 6327
Leu Met Thr Asp Ala Lys Leu Arg Glu Arg Ser Val Cys Met Pro Tyr
 1              5              10              15
Val Asn Leu Gln Asn Leu Pro Thr Lys Ala Asn Val Val Thr Glu Pro
      20              25              30
Asn Gln Val Val Val Lys Pro Ile Met Ala Lys Pro Asn Val Ile Ala
      35              40              45
Lys Leu Phe Gly Ile Ser Tyr Ser Ser Val Asn Arg Ile Leu Lys Glu
      50              55              60
Trp Glu Lys Asp Ser Lys Gly Ile Asp Asp Leu Tyr Tyr Ser Leu Ser
 65              70              75              80
Ser Thr Met Thr Val Ile Ser Ile Ser Arg Phe Glu Gln Tyr Met Lys
      85              90              95
Lys Arg His Lys Glu Ser Ser Pro Arg Ala Trp Pro Arg Ser
      100              105              110

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<210> 6328  
 <211> 492  
 <212> PRT  
 <213> S.epidermidis

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<400> 6328
Asn Ile Val Glu Trp Thr Arg Glu Glu Arg Tyr Gln Arg Ile Glu Asp
 1              5              10              15
Val Asp Glu Thr Tyr Leu Glu Gln Leu Lys His Gln Val Asp Thr Ser
      20              25              30
Leu Tyr Arg Gln Thr Phe His Ile Gln Pro Glu Met Gly Leu Leu Asn
      35              40              45
Asp Pro Asn Gly Leu Ile Tyr Tyr Asn Gly His Tyr Tyr Ile Ser His
      50              55              60
Gln Trp Phe Pro Leu Gly Ala Val His Gly Leu Lys Tyr Trp Phe Asn
 65              70              75              80
Tyr Lys Ser Lys Asp Leu Leu His Phe Glu Pro Gln Gly Thr Leu Leu
      85              90              95
Lys Pro Asp Thr Lys Tyr Asp Ser His Gly Val Tyr Ser Gly Ser Ala
      100              105              110
Phe Glu Tyr Gln Asn His Leu Tyr Tyr Met Tyr Thr Gly Asn His Arg

```

|   |     |     |
|---|-----|-----|
| 115   | 120 | 125 |
| Asp Gln His Trp Asn Arg Ile Ser Ser Gln Met Ile Ala Arg Met Asn |     |     |
| 130   | 135 | 140 |
| Lys Asp Gly Lys Ile Glu Lys Phe Pro Lys Pro Val Ile His Gly Gln |     |     |
| 145   | 150 | 155 |
| Pro Glu Gly Tyr Thr Ser His Phe Arg Asp Pro Lys Val Phe Glu Lys |     |     |
|   | 165 | 170 |
| Asn Ser Gln Leu Tyr Ala Ile Leu Gly Ala Gln Asn Glu Asn Glu Met |     |     |
|   | 180 | 185 |
| Gly Arg Leu Leu Leu Tyr Arg Ser Gln Asp Val Val Asp Trp His Phe |     |     |
|   | 195 | 200 |
| Glu Gly Glu Ile Lys Thr Asn Leu Thr Gln Phe Gly Tyr Met Trp Glu |     |     |
|   | 210 | 215 |
| Cys Pro Asp Tyr Phe Arg Leu Ser Asn Lys Asp Val Ile Leu Met Cys |     |     |
| 225   | 230 | 235 |
| Pro Gln Gly Val Glu Ala Glu Gly Asp Lys Phe Arg Asn Ile Tyr Gln |     |     |
|   | 245 | 250 |
| Ser Gly Tyr Met Ile Gly Asp Leu Asn Phe Asn Asn Leu Phe Phe Asp |     |     |
|   | 260 | 265 |
| His Glu Ser Phe Gln Glu Leu Asp Asn Gly Phe Asp Phe Tyr Ala Pro |     |     |
|   | 275 | 280 |
| Gln Thr Phe Val Asp Ala Asp Gly Gln Arg Ile Leu Ile Gly Trp Met |     |     |
|   | 290 | 295 |
| Gly Leu Pro Asp Thr Glu Tyr Pro Thr Asp Lys Glu Gly Trp Ala His |     |     |
| 305   | 310 | 315 |
| Cys Leu Thr Ile Pro Arg Val Leu Thr Ile Glu Asn Gly Lys Leu Lys |     |     |
|   | 325 | 330 |
| Gln Arg Pro Phe Lys Gln Leu Glu Asp Leu Arg Thr Asn Lys Glu Thr |     |     |
|   | 340 | 345 |
| Ala Leu Gly Tyr Ala Asn Lys Phe Lys Arg Lys Leu His Pro Tyr Glu |     |     |
|   | 355 | 360 |
| Gly Lys Gln Tyr Glu Met Ile Ile Asp Ile Leu Glu Asn Asp Ala Ser |     |     |
|   | 370 | 375 |
| Glu Ile Tyr Phe Glu Leu Arg Ser Ser Arg Ser Glu Ser Thr Leu Ile |     |     |
| 385   | 390 | 395 |
| Thr Tyr Asn Lys His Glu Asn Lys Leu Thr Leu Asp Arg Thr Asp Ser |     |     |
|   | 405 | 410 |
| Gly Thr Leu Pro Ser Asn Val Asp Gly Thr Thr Arg Ser Thr Ile Leu |     |     |
|   | 420 | 425 |
| Asp Ser Pro Leu Lys Gln Leu Gln Ile Phe Val Asp Thr Ser Ser Ile |     |     |
|   | 435 | 440 |
| Glu Ile Phe Cys Asn Asp Gly Glu Arg Val Leu Thr Ser Arg Ile Phe |     |     |
|   | 450 | 455 |
| Pro Asn Glu Asp Ala Thr Gly Ile Lys Ala Ser Thr Glu Ser Gly Gln |     |     |
| 465   | 470 | 475 |
| Val Tyr Leu Lys Phe Thr Lys Tyr Glu Leu Lys Gly                 |     |     |
|   | 485 | 490 |

&lt;210&gt; 6329

&lt;211&gt; 417

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6329

|   |
|---|
| Trp Val Ala Leu Leu Pro Phe Leu Phe Arg Arg Asp Lys Met Trp His |
| 1 5 10 15   |

Glu Lys Phe Thr Asn Lys His Gly Asp Val Gln Tyr Arg Tyr Tyr Glu  
 20 25 30  
 Lys Tyr Lys Asp Pro Leu Thr Asn Lys Trp Arg Arg Val Ser Val Val  
 35 40 45  
 Leu Asn Lys Asn Gly Lys Gln Ser Gln Lys Glu Ala Gln Lys Leu Leu  
 50 55 60  
 Asn Lys Arg Ile Glu Ala Lys Ile Asn Asp Lys Thr Pro Ile Asp Leu  
 65 70 75 80  
 Lys Thr Leu Thr Phe His Gln Ala Cys Asp Glu Trp Leu Asp Arg Tyr  
 85 90 95  
 Ile Lys Thr Ser Gly Ser Lys Gln Ser Thr Ile Lys Thr Lys Lys Tyr  
 100 105 110  
 Lys Ile Lys His Ile Lys Arg Asn Ile Asn Ser Asp Ile Leu Val Lys  
 115 120 125  
 Asn Met Asn Ser Asp Val Val Gln Lys Ser Val Asp Asn Ala Val Lys  
 130 135 140  
 Asp Asn Leu Ser His Lys Val Val Lys Asp Ala Met Ser Ile Ile Arg  
 145 150 155 160  
 Asn Ile Met Lys Tyr Ile Gln Arg Lys Tyr Lys Leu Thr Asp Ile Ser  
 165 170 175  
 Tyr Leu Asp Asp Ile Val Ile Pro Lys Lys Ala Thr Thr Arg Glu Glu  
 180 185 190  
 Val Lys Ala Lys Arg Glu Asn Tyr Leu Glu Met Asp Glu Val Lys Ala  
 195 200 205  
 Ile Val Asp Asn Leu His Glu Ile Ala Asn Ser Lys Arg Ala Asp Tyr  
 210 215 220  
 Met Lys Arg Ser Phe Ile Met Thr Ala Tyr Ile Met Glu Phe Gln Ala  
 225 230 235 240  
 Leu Asn Gly Met Arg Ile Gly Glu Leu Leu Ala Ile Gln Pro Asn Asn  
 245 250 255  
 Ile Asp Phe Asp Lys Lys Thr Leu Glu Ile Asp Gly Thr Ile His Trp  
 260 265 270  
 Arg Asn Glu Gly Asn Ala Val Gly Phe Lys Asp Thr Thr Lys Thr Glu  
 275 280 285  
 Ser Ser Tyr Arg Thr Ile Ser Leu Thr Thr Arg Ser Cys Asp Ile Leu  
 290 295 300  
 Arg Lys Val Met Leu Glu Asn Lys Lys Ala Ile Gln Trp Glu Ser Met  
 305 310 315 320  
 Tyr Gln Asp Arg Gly Phe Ile Phe Thr Asn Tyr Arg Gly Asn Pro Met  
 325 330 335  
 Ser Leu Ser Thr Ile Asn Arg Asn Met Gln Gln Ser Ala Asn Asn Val  
 340 345 350  
 Gly Ile Thr Lys His Ile Thr Ser His Thr Met Arg His Ser His Ile  
 355 360 365  
 Ser Leu Leu Ser Gln Leu Gly Ile Ser Leu Lys Ala Ile Met Gln Arg  
 370 375 380  
 Val Gly His Thr Asp His Lys Thr Thr Leu Gln Ile Tyr Ser His Val  
 385 390 395 400  
 Thr Asp Gln Met Asp Lys Asp Met Met Asn Lys Leu Glu Lys Val Gly  
 405 410 415  
 Asn

&lt;210&gt; 6330

&lt;211&gt; 54

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6330

```

Lys Ala Phe Cys Asp Ala Lys Ser Tyr Leu Leu Ser Ser Phe Glu Cys
1          5          10          15
Ile Ile Ile His Leu Ser Gly Asp Asn Gly Lys Glu Val Thr Pro Val
          20          25          30
Pro Met Pro Asn Thr Glu Val Lys Leu Leu Ser Ala Asp Gly Ser Arg
          35          40          45
Thr Asp Val Pro Leu Glu
          50

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&lt;210&gt; 6331

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6331

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Gln Leu Ile Phe Tyr Phe Gln Leu Phe Thr Ile Phe Ile Tyr Glu Ile
1          5          10          15
Ile Tyr Leu Glu Arg Lys Arg Arg Thr Lys Leu His Asp Glu Gln Ser
          20          25          30
Asn Leu Ser Thr Asn Tyr Ile Asn Phe His His Pro Asn Tyr Thr Cys
          35          40          45
Lys Cys Asn Tyr Leu Tyr Tyr Arg Glu Thr
          50          55

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&lt;210&gt; 6332

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6332

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Arg Arg Ile Arg Met Lys Arg Leu Leu Gly Thr Leu Phe Ala Ala Thr
1          5          10          15
Leu Val Leu Ser Ala Cys Ser Gln Asp Asp Thr Lys Glu Asp Glu His
          20          25          30
Lys Lys Ser Glu Asn Thr Ala Glu Arg Lys Ala Asp Asp Lys Lys Asp
          35          40          45
Lys Lys Thr Lys Glu Asp Lys Lys Ser Lys Lys Glu Lys Lys Ser Gln
          50          55          60
Glu Asn Glu Asp Asn Lys Ser Thr Gln Glu Asp Asn Ser Thr Asp Asn
65          70          75          80
Gln Glu Thr Gln Asp Pro Ala Thr Gln Gly Gln Lys Gln Thr Gln Gln
          85          90          95
Asp Asn Gln Gln Asn Tyr Asp Asp Gln Gln Ser Tyr His Glu Pro Thr
          100          105          110
Lys Asp Glu Val Tyr Glu Trp Asp Lys Gln Asn Ile Pro Gly Gly Thr
          115          120          125
Asp Tyr Gly Leu Ile Asp Pro Glu Asp Val Asn Thr Glu Ser Glu Asp
          130          135          140
Asn Ala Arg Gln Asn Arg Ile Asp Glu Ile Asn Glu Glu Met Glu Asp
145          150          155          160
Pro Asn Ile Ser Val Ser Asp Tyr Asn Lys Leu Val Asp Glu Tyr Asn
          165          170          175
Glu Leu Asn Asn Glu

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180

<210> 6333  
 <211> 52  
 <212> PRT  
 <213> S.epidermidis

<400> 6333  
 Asp Phe Phe Ser Leu Lys Asp Asn Ile Ala Phe Lys Ile Ile Lys Val  
 1 5 10 15  
 Arg His Ile Asn Ile Pro Phe Glu Gly Ile Lys Lys Met Asn Ala Thr  
 20 25 30  
 Pro Ile Asn Gly Asn Asn Gly Gln Asn Ile Asn Lys Ile Phe Arg Leu  
 35 40 45  
 Val Gly Asn Ile  
 50

<210> 6334  
 <211> 68  
 <212> PRT  
 <213> S.epidermidis

<400> 6334  
 Leu Cys Trp Leu Ser Asn Pro His His Leu Ser Trp Trp Glu Thr Val  
 1 5 10 15  
 Ser Gly Gly Gln Phe Asp Trp Gly Gly Arg Leu Leu Lys Gly Asn Gly  
 20 25 30  
 Gly Ala Gln Arg Phe Pro Gln Asn Gly Trp Lys Ser Phe Ile Glu Cys  
 35 40 45  
 Lys Gly Ile Arg Glu Leu Asp Cys Glu Thr Tyr Lys Ser Ser Arg Val  
 50 55 60  
 Glu Arg Arg Thr  
 65

<210> 6335  
 <211> 354  
 <212> PRT  
 <213> S.epidermidis

<400> 6335  
 Val Glu Arg Arg Tyr Thr Tyr Met Ser Tyr Lys Ile Val Ala Leu Pro  
 1 5 10 15  
 Gly Asp Gly Ile Gly Pro Glu Ile Leu Ser Gly Thr Leu Glu Leu Leu  
 20 25 30  
 Lys Leu Ile Ser Glu Lys Tyr His Phe Glu Tyr His Leu Glu Ser His  
 35 40 45  
 His Phe Gly Gly Val Ser Ile Asp Tyr Tyr Gly Thr Pro Leu Thr Asn  
 50 55 60  
 Glu Thr Leu Gln Ser Cys Lys Asn Ala Asp Ala Ile Leu Leu Gly Ala  
 65 70 75 80  
 Ile Gly Gly Pro Lys Trp Thr Asp Pro Asn Asn Arg Pro Glu His Gly  
 85 90 95  
 Leu Leu Lys Leu Arg Lys Ser Leu Asn Leu Phe Ala Asn Ile Arg Arg  
 100 105 110  
 Thr Phe Val Thr Lys Gly Ala Ser His Leu Ser Pro Leu Lys Gln Asp  
 115 120 125

```

Ile Val Glu Gly Thr Asp Leu Val Ile Val Arg Glu Leu Thr Ser Gly
130 135 140
Ile Tyr Phe Gly Glu Pro Ser Tyr Val Lys Lys Thr Glu Ala Leu Asp
145 150 155 160
Ser Leu Lys Tyr Ser Ser Gln Glu Ile Glu Arg Ile Val Arg Ile Ala
165 170 175
Phe Asn Leu Ala Asn Arg Arg Arg Lys Lys Leu Thr Ser Val Asp Lys
180 185 190
Glu Asn Val Leu Ser Ser Ser Lys Leu Trp Arg Gln Ile Val Asn Asp
195 200 205
Val Lys Lys Asp Tyr Pro Glu Val Glu Val Asn His Met Leu Val Asp
210 215 220
Ala Cys Ser Met His Leu Ile Thr Gln Pro Thr Gln Phe Asp Val Ile
225 230 235 240
Val Thr Glu Asn Leu Phe Gly Asp Ile Leu Ser Asp Glu Ala Ser Val
245 250 255
Ile Pro Gly Ser Leu Gly Leu Ser Pro Ser Ala Ser Phe Gly Gln Thr
260 265 270
Gly Thr Arg Leu Tyr Glu Pro Ile His Gly Ser Ala Pro Asp Ile Ala
275 280 285
Asn Glu Asp Lys Ala Asn Pro Phe Gly Met Val Leu Ser Leu Ala Leu
290 295 300
Cys Leu Arg Glu Ser Leu Asn Gln Asn Asp Ala Ala Asn Glu Leu Glu
305 310 315 320
Ser Ile Val Tyr Ser Phe Ile Gln Ser Asn Lys Thr Thr Ala Asp Leu
325 330 335
Gly Gly Gln Tyr Arg Thr Ser Glu Ile Phe Lys Leu Leu Lys Glu Lys
340 345 350
Tyr Leu

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<210> 6336
<211> 321
<212> PRT
<213> S.epidermidis

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<400> 6336
Phe Ile Met Arg Arg Leu Phe Ala Ile Gly Glu Ala Leu Ile Asp Phe
1 5 10 15
Ile Pro Asn Val Thr His Ser Lys Leu Lys Asp Val Glu Gln Phe Ser
20 25 30
Arg Gln Val Gly Gly Ala Pro Cys Asn Val Ala Ala Thr Val Ser Lys
35 40 45
Leu Gly Gly Lys Ser Glu Met Ile Thr Gln Leu Gly Asn Asp Ala Phe
50 55 60
Gly Asp Ile Ile Val Glu Thr Ile Glu Gln Leu Gly Val Gly Thr Gln
65 70 75 80
Tyr Ile Lys Arg Thr Asn Lys Ala Asn Thr Ala Leu Ala Phe Val Ser
85 90 95
Leu Gln Asp Asp Gly Gln Arg Asp Phe Ser Phe Tyr Arg Lys Pro Ser
100 105 110
Thr Asp Met Leu Tyr Gln Pro Glu Asn Ile Asp Asp Ile Gln Ile Phe
115 120 125
Gln Asp Asp Ile Leu His Phe Cys Ser Val Asp Leu Ile Glu Ser Asp
130 135 140
Met Lys Asn Ala His Glu Lys Met Ile Glu Lys Phe Glu Ser Val Gly

```

145                      150                      155                      160  
 Gly Thr Ile Val Phe Asp Pro Asn Val Arg Leu Pro Leu Trp Glu Asp  
                                  165                      170                      175  
 Lys Leu Glu Cys Gln Arg Thr Ile Asn Ala Phe Ile Pro Lys Ala His  
                                  180                      185                      190  
 Ile Val Lys Ile Ser Asp Glu Glu Leu Leu Phe Ile Thr Gly Lys Lys  
                                  195                      200                      205  
 Asn Glu Asp Glu Ala Ile Gln Ser Leu Phe Arg Gly Gln Val Asn Val  
                                  210                      215                      220  
 Val Ile Tyr Thr Gln Gly Ala Gln Gly Ala Thr Ile Tyr Thr Lys Asp  
 225                      230                      235                      240  
 Asp Tyr Arg Ile His Glu Gly Tyr Gln Val Gln Ala Ile Asp Thr  
                                  245                      250                      255  
 Thr Gly Ala Gly Asp Ala Phe Ile Gly Ala Ile Ile Tyr Cys Ile Leu  
                                  260                      265                      270  
 Glu Ser Arg His Ser Glu Cys Lys Asp Leu Phe Lys Glu Lys Gly Lys  
                                  275                      280                      285  
 Asp Ile Leu Ala Phe Ser Asn Arg Val Ala Ala Leu Thr Thr Thr Lys  
                                  290                      295                      300  
 His Gly Ala Ile Glu Ser Leu Pro Thr Lys Glu Asp Ile Lys Asp Tyr  
 305                      310                      315                      320  
 Tyr

<210> 6337

<211> 282

<212> PRT

<213> S.epidermidis

<400> 6337

Phe Cys Val Gly Leu Arg Lys Phe Phe Val His Tyr Asn His Phe Arg  
 1                      5                      10                      15  
 Arg Lys Met Met Asp Ile Asp Lys Leu Glu Val Gly Lys Arg Ile Lys  
                                  20                      25                      30  
 Asn Ile Arg Leu Asn Lys Ser Lys Asn Leu Arg Glu Phe Gly Glu Leu  
                                  35                      40                      45  
 Ile Ser Lys Asn Leu Lys Glu Asp Lys Asn Ile Ser Asp Ser Ile Val  
                                  50                      55                      60  
 Ser Arg Trp Glu Lys Gly Val Ser Ile Pro Ser Ala Lys Arg Leu Lys  
 65                      70                      75                      80  
 Glu Ile Ala Asp Ile Gly Asn Val Ser Val Asn Tyr Leu Leu Tyr Gly  
                                  85                      90                      95  
 Val Lys Val Thr Tyr Lys Asp Ile His Asn Asn Ile Asn Thr Val Ser  
                                  100                      105                      110  
 Met Lys Asn Glu Ile Met Asp Asn Leu Glu Lys Phe Leu Lys Tyr Tyr  
                                  115                      120                      125  
 Leu Leu Tyr Ser Glu Tyr Asn Asn Tyr Ser Ile Lys Thr Ala Glu Leu  
                                  130                      135                      140  
 Leu Asp Leu Leu Phe Glu Asn Ala Gly Tyr Asp Ile Thr Thr Leu Thr  
 145                      150                      155                      160  
 Lys Asp Leu Cys Ala Leu Val Ser Asp Lys Arg Phe Ser Phe Tyr Gln  
                                  165                      170                      175  
 His Gly Val Tyr Leu Leu Leu Asn Glu Asp Phe Ser Lys Leu His Val  
                                  180                      185                      190  
 Gln Leu Tyr Leu Ser Glu Phe Ile Tyr Asn Leu Leu Val Gln Ile Thr  
                                  195                      200                      205



Leu Asp Tyr Pro Asn Ile Tyr Ile Lys Asn Leu Val Leu Gln Ile Thr  
 210 215 220  
 Glu Thr Lys Glu Arg Ile Lys Asp Ile Ser His Lys Lys Asp Ala Tyr  
 225 230 235 240  
 Thr Glu Phe Glu Ile Glu Thr His Leu Ala Asp Phe Ile Asn His Lys  
 245 250 255  
 Glu Tyr Lys Lys Leu Leu Asp Asn Leu Ser Gln Leu Glu Lys Lys Ile  
 260 265 270  
 Thr Asn Asp Asn Ser Leu Ile Asp Asn Asn  
 275 280

<210> 6338

<211> 546

<212> PRT

<213> S.epidermidis

<400> 6338

Lys Glu Lys Gly Glu Leu Asn Phe Met Thr Asn Asn Gln Thr Leu Val  
 1 5 10 15  
 Leu Ile Ile Leu Thr Phe Ile Ile Leu Ile Thr Leu Val Asn Val Ile  
 20 25 30  
 Ile Ser Ile Ile Glu Arg Arg Lys Gln Ile Ala Lys Ile Asn Thr Leu  
 35 40 45  
 Trp Asp Asn Lys Leu Lys Leu Glu Ser Phe Ile Arg Pro Asn Ser Arg  
 50 55 60  
 Phe Asp Ala Gln Tyr His Ala Tyr Arg Asp His Tyr Asn Glu Gln Ser  
 65 70 75 80  
 Phe Ile Asp Asp Lys Thr Trp Ser Asp Leu Asn Met Asp Thr Leu Phe  
 85 90 95  
 His Lys Ile Asn Phe Asn Phe Thr Ala Ile Gly Glu Met Arg Leu Tyr  
 100 105 110  
 Ala Thr Leu Arg Gly Met Phe Lys Val Asn Gln Thr Ser Leu Ile Asn  
 115 120 125  
 Lys Phe Lys Asp Asn Lys Val Phe Arg Leu Asn Val Ser Tyr Ile Leu  
 130 135 140  
 Ser Lys Ile Gly Lys Asn Val Tyr Pro Leu Phe Pro Asp Gln Met Leu  
 145 150 155 160  
 Pro Thr Lys Arg Asn Ile Leu Leu Met Phe Cys Pro Leu Leu Pro Phe  
 165 170 175  
 Ile Gly Val Ala Phe Ile Phe Leu Ile Pro Ser Lys Gly Ile Leu Ile  
 180 185 190  
 Cys Leu Thr Phe Met Ile Leu Asn Ala Ile Leu Ser Phe Lys Leu Lys  
 195 200 205  
 Lys Ser Tyr Asp Gln Asp Leu Lys Ser Ile Phe Tyr Thr Ala Asn Val  
 210 215 220  
 Ile Lys Gln Ser Gln Ala Leu Ser Lys Ile Glu Ser Thr Pro Ala Ile  
 225 230 235 240  
 Ser Val Asp Phe Thr His Phe Lys Ala Ser Arg Arg Phe Ser Gly Leu  
 245 250 255  
 Leu Val Arg Val Glu Ser Gln Asp Met Ala Ser Ser Ile Ile Met Phe  
 260 265 270  
 Ile Lys Leu Val Phe Met Ile Asp Tyr Phe Leu Phe His Leu Ile Gln  
 275 280 285  
 Arg Ser Tyr Phe Lys Tyr Gln Glu Glu Val Met Ala Cys Tyr Asp Tyr  
 290 295 300  
 Ile Ser Ile Leu Asp Asn His Tyr Ser Ile Ala Met Tyr Gln His Thr

2800

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305          310          315          320
Leu Thr His Tyr Cys Tyr Pro Lys Ile Asn His Asn Ile Asn Gly Leu
          325          330          335
Gln Met Lys Ser Ile Ile His Pro Leu Leu Asp Glu Glu Asn Ala Ile
          340          345          350
Ala Asn Thr Ile Asp Ile Ser Asn His Ile Leu Leu Thr Gly Ser Asn
          355          360          365
Ala Ser Gly Lys Ser Thr Phe Met Lys Ala Val Ala Leu Asn Leu Ile
          370          375          380
Leu Ala Gln Ser Ile Gln Thr Ala Thr Ala His Ser Phe Ile Tyr Gln
385          390          395          400
Pro Gly Tyr Val Met Thr Ser Met Ala Asn Ala Asp Asp Val Leu Ser
          405          410          415
Gly Asp Ser Tyr Phe Met Ser Glu Leu Lys Ser Ile Arg Arg Leu Phe
          420          425          430
Asn Thr His Gln Cys Asn Lys Ile Tyr Cys Phe Ile Asp Glu Ile Phe
          435          440          445
Lys Gly Thr Asn Thr Thr Glu Arg Ile Ala Ala Ser Glu Ser Val Leu
          450          455          460
Ser Tyr Leu Asp Asn Gln Lys Ala Tyr Gln Val Ile Ala Ala Thr His
465          470          475          480
Asp Val Glu Leu Ser Thr Leu Leu Glu Asn Thr Tyr Asn Asn Tyr His
          485          490          495
Phe Asn Glu Ser Ile Gln Glu Asn Ser Ile Phe Phe Asp Tyr Lys Ile
          500          505          510
Lys Pro Gly Lys Ala Asn Thr Arg Asn Ala Ile Glu Leu Leu Arg Ile
          515          520          525
Thr Gln Phe Pro Ile Asp Ile Tyr Gln Arg Ala Gln Gln Asn Ile Arg
530          535          540
Asn Leu
545

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<210> 6339

<211> 160

<212> PRT

<213> S.epidermidis

<400> 6339

```

Ile Ile Arg Gly Gly Thr Lys Leu Val Lys Pro Thr Arg Glu Gln Leu
1          5          10          15
Asn Ile Arg Lys Met Ser Val Glu Asp Val Pro Lys Val Phe Asp Ile
          20          25          30
Glu Arg Asn Ser Phe Ser His Ser Ser Trp Ser Ile Asp Ala Phe Tyr
          35          40          45
His Glu Ile Glu Asn Asn Glu Phe Ala Thr Tyr Phe Val Ile Glu Phe
          50          55          60
Ser Asp Lys Ile Ile Gly Tyr Val Gly Leu Trp Leu Val Val Asp Gln
65          70          75          80
Ala Gln Ile Thr Thr Ile Ala Ile Ser Lys Ala Phe Arg Gly Tyr Gly
          85          90          95
Leu Gly Gln Leu Leu Leu Lys Tyr Ala Met Asn Tyr Ala Arg Phe Ser
          100          105          110
Cys Asp Val Met Ser Leu Glu Val Arg Ile Asp Asn Asp Val Ala Gln
          115          120          125
His Val Tyr Arg Asn Leu Gly Phe Gln Asn Gly Gly Lys Arg Lys Asn
130          135          140

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Seq. = 6339

Tyr Tyr Gly Glu Gly Glu Asp Ala Leu Val Met Trp Val Asn Leu Lys  
 145 150 155 160

<210> 6340

<211> 44

<212> PRT

<213> S.epidermidis

<400> 6340

Pro Leu Leu Leu Thr Phe Gln His Arg Ala Gly Val Ser Pro Tyr Thr  
 1 5 10 15  
 Ser Pro Tyr Gly Leu Ala Glu Thr Cys Val Phe Asp Lys Gln Ser Leu  
 20 25 30  
 Gly Pro Ile His Cys Gly Ser Ser Gly Arg Glu Pro  
 35 40

<210> 6341

<211> 437

<212> PRT

<213> S.epidermidis

<400> 6341

Pro Tyr Leu Ile Leu Leu Phe Lys Lys Thr Leu Ile Met Met Phe Leu  
 1 5 10 15  
 Lys Glu Val Val Ser Met Asn Met Asn Asp Thr Ile Phe Leu Phe Leu  
 20 25 30  
 Cys Thr Leu Leu Val Trp Leu Met Thr Pro Gly Leu Ser Leu Phe Tyr  
 35 40 45  
 Gly Gly Leu Val Gln Ser Lys Asn Ala Leu Asn Thr Val Met Gln Ser  
 50 55 60  
 Met Val Ala Ile Val Ile Val Thr Phe Val Trp Ile Ile Ile Gly Phe  
 65 70 75 80  
 Ser Leu Ser Phe Asp Gly Gly Asn Gln Trp Ile Gly Gly Leu Lys Phe  
 85 90 95  
 Leu Gly Leu His His Val Gly Phe Glu Thr Ser Lys Thr Leu Ser Pro  
 100 105 110  
 His Ile Pro Leu Ser Leu Phe Met Leu Phe Gln Met Met Phe Cys Thr  
 115 120 125  
 Ile Ala Val Ser Ile Leu Ser Gly Ser Ile Ala Glu Lys Met Arg Phe  
 130 135 140  
 Ile Pro Tyr Leu Ile Phe Val Ser Leu Trp Val Leu Leu Ile Tyr Ser  
 145 150 155 160  
 Pro Val Ala His Trp Val Trp Gly Gly Gly Trp Ile Ser Lys Ile Gly  
 165 170 175  
 Ala Ile Asp Tyr Ala Gly Gly Thr Val Val His Ile Thr Ser Gly Val  
 180 185 190  
 Ser Gly Leu Val Leu Gly Ile Met Ile Gly Ile Gly Lys Lys Lys Glu  
 195 200 205  
 Lys His Thr Pro His Asn Leu Leu Ile Thr Leu Ile Gly Gly Ile Leu  
 210 215 220  
 Val Trp Leu Gly Trp Tyr Gly Phe Asn Val Gly Ser Ala Phe Thr Phe  
 225 230 235 240  
 Asp His Ile Ala Met Ile Ser Phe Val Asn Thr Val Ile Gly Ala Ser  
 245 250 255  
 Ala Gly Ala Phe Gly Trp Leu Ile Phe Glu Tyr Ile Leu Lys Lys Thr  
 260 265 270

Thr Ser Leu Leu Gly Leu Leu Ser Gly Ala Leu Ser Gly Leu Val Ala  
 275 280 285  
 Ile Thr Pro Ala Ala Gly Tyr Val Ser Tyr Met Ser Ala Met Ile Ile  
 290 295 300  
 Ala Ile Ile Gly Gly Ile Cys Cys Tyr Ile Val Ile Asn Leu Ile Lys  
 305 310 315 320  
 Val Lys Leu Gln Tyr Asn Asp Ala Leu Asp Ala Phe Gly Ile His Gly  
 325 330 335  
 Val Gly Gly Ile Leu Gly Ala Val Leu Thr Gly Val Phe Gln Ser His  
 340 345 350  
 Gln Ile Asn Ser Ala Val Gln Asn Gly Phe Ile Tyr Thr Ala Asp Phe  
 355 360 365  
 Lys Val Val Val Ile Gln Leu Gly Ala Ala Ile Ala Thr Val Val Phe  
 370 375 380  
 Ser Ala Ile Val Thr Phe Leu Ile Ala Arg Phe Ile Lys Ile Phe Thr  
 385 390 395 400  
 Pro Leu Ala Thr Thr Gln Glu Glu Asp Lys Thr Gly Leu Asp Ala Ile  
 405 410 415  
 Val His Gly Glu Lys Ala Tyr Phe Tyr Gly Glu Leu Asn Lys Phe Asn  
 420 425 430  
 Arg His Ile Lys Phe  
 435

<210> 6342

<211> 178

<212> PRT

<213> S.epidermidis

<400> 6342

Asn Ser Arg Ile Leu Thr Glu Ser Lys Ile Asn Lys Thr Glu Ile Thr  
 1 5 10 15  
 Asp Ile Val Val Ala Lys Gly Pro Gly Ser Tyr Thr Gly Leu Arg Ile  
 20 25 30  
 Gly Val Thr Val Ala Lys Thr Leu Ala Tyr Ala Leu Asn Thr Asn Leu  
 35 40 45  
 Tyr Gly Val Ser Ser Leu Lys Ala Leu Ala Ser Thr Val Lys Asp Ser  
 50 55 60  
 Thr Lys Leu Leu Val Pro Ile Phe Asp Ala Arg Arg Glu Ala Val Tyr  
 65 70 75 80  
 Ala Gly Val Tyr Gln Tyr Gln Asp Asn Glu Leu Ile Thr Ile Ile Asp  
 85 90 95  
 Asp Thr Tyr Ile Pro Ile Phe Glu Leu Ile Glu Lys Leu His Gln Leu  
 100 105 110  
 Asn Gln Pro Tyr Val Phe Val Gly Tyr His Thr Glu Lys Ile Lys His  
 115 120 125  
 Leu Leu Asp Ser Asp Ile Val Glu Gln Leu Pro Gln Ala Ser Ser Met  
 130 135 140  
 Lys Gln Leu Ile Gln Lys Pro Glu Asn Ile His Ser Phe Thr Pro Lys  
 145 150 155 160  
 Tyr His Lys Leu Ser Glu Ala Glu Arg Asn Trp Leu Asn Gln Gln Glu  
 165 170 175  
 Asn Asn

<210> 6343

<211> 368

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6343

Glu Phe Gly Ile Pro Lys Trp Trp Gln Lys Lys Glu Leu Leu Trp Arg  
 1 5 10 15  
 Arg Arg Gly Arg Ile Ser His Val Gly Glu Phe Glu Met Thr Asn Asn  
 20 25 30  
 Lys Leu Ile Leu Ala Ile Glu Thr Ser Cys Asp Glu Thr Ser Val Ser  
 35 40 45  
 Val Ile Lys Asn Gly Thr Glu Leu Leu Ser Asn Thr Val Leu Ser Gln  
 50 55 60  
 Ile Asp Ser His Lys Arg Phe Gly Gly Val Val Pro Glu Val Ala Ser  
 65 70 75 80  
 Arg His His Val Glu Gly Ile Thr Ala Thr Ile Asp Glu Ser Leu Val  
 85 90 95  
 Ser Ala Lys Val Lys Met Glu Asp Ile Asp Ala Ile Ala Val Thr Gln  
 100 105 110  
 Gly Pro Gly Leu Ile Gly Ala Leu Leu Ile Gly Ile Asn Ala Ala Lys  
 115 120 125  
 Ala Leu Ala Phe Ala Tyr Asp Lys Pro Ile Ile Pro Val His His Ile  
 130 135 140  
 Ala Gly His Ile Tyr Ala Asn His Leu Glu Gln Pro Leu Thr Phe Pro  
 145 150 155 160  
 Leu Met Ser Leu Ile Val Ser Gly Gly His Thr Glu Leu Val Tyr Met  
 165 170 175  
 Lys Asn His Leu Asp Phe Glu Val Ile Gly Glu Thr Arg Asp Asp Ala  
 180 185 190  
 Val Gly Glu Ala Tyr Asp Lys Val Ala Arg Thr Ile Asn Leu Pro Tyr  
 195 200 205  
 Pro Gly Gly Pro His Ile Asp Arg Leu Ala Ala Lys Gly Lys Asp Val  
 210 215 220  
 Tyr Asp Phe Pro Arg Val Trp Leu Glu Lys Asp Ser Tyr Asp Phe Ser  
 225 230 235 240  
 Phe Ser Gly Leu Lys Ser Ala Val Ile Asn Lys Leu His Asn Leu Arg  
 245 250 255  
 Gln Lys Asn Ile Glu Ile Val Ala Glu Asp Val Ala Thr Ser Phe Gln  
 260 265 270  
 Asn Ser Val Val Glu Val Leu Thr Tyr Lys Ala Ile His Ala Cys Lys  
 275 280 285  
 Thr Tyr His Val Asn Arg Leu Ile Val Ala Gly Gly Val Ala Ser Asn  
 290 295 300  
 Lys Gly Leu Arg Thr Ala Leu Ser Glu Ala Cys Lys Lys Glu Gly Ile  
 305 310 315 320  
 His Leu Thr Ile Pro Ser Pro Val Leu Cys Thr Asp Asn Ala Ala Met  
 325 330 335  
 Ile Gly Ala Ala Gly Tyr Tyr Leu Tyr Gln Ala Gly Leu Arg Gly Asp  
 340 345 350  
 Leu Ala Leu Asn Gly Gln Asn Asn Ile Asp Ile Glu Thr Phe Ser Val  
 355 360 365

&lt;210&gt; 6344

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6344

Val Phe Val Val Asp Asn Tyr Leu Tyr Tyr Glu Met Thr Phe Asn Ile  
 1 5 10 15  
 Cys Phe Asn Ser Phe Thr Asp Phe Asn Asp Thr Cys Ile Ile Tyr Ala  
 20 25 30  
 Lys Lys Gly Val Arg Tyr Met Pro Asp Asp Phe Lys Ile Pro Arg Ala  
 35 40 45  
 Thr Leu Lys Arg Leu Pro Leu Tyr Tyr Arg Phe Val Ser Ile Leu Lys  
 50 55 60  
 Gly Lys Gly Ile Asp Arg Val Asn Ser Lys Thr Ile Ser Glu Ala Leu  
 65 70 75 80  
 Gln Ile Asp Ser Ala Thr Ile Arg Arg Asp Phe Ser Tyr Phe Gly Glu  
 85 90 95  
 Leu Gly Lys Lys Gly Tyr Gly Tyr Asn Ile Asp Ser Met Leu Glu Phe  
 100 105 110  
 Phe Lys Ser Glu Leu Ser Glu Ser Asp Gln Ile Lys Ile Ala Ile Ile  
 115 120 125  
 Gly Ile Gly Asn Leu Gly Arg Ala Leu Leu Thr Tyr Asn Phe Ser Ile  
 130 135 140  
 His Asp Glu Met Thr Ile Thr Glu Ala Phe Asp Ile Arg Pro Asp Ile  
 145 150 155 160  
 Ile Gly Glu Asn Ile Gly Asp Val Val Val Lys His Ser Asp Asp Ile  
 165 170 175  
 Lys Met Thr Leu Glu Ser Glu Asp Ile Asp Val Val Ile Leu Thr Thr  
 180 185 190  
 Pro Asp Asn Val Ala Gln Gln Val Ala Asp Glu Leu Val Lys Ala Gly  
 195 200 205  
 Val Lys Gly Ile Leu Asn Phe Thr Pro Arg Arg Ile Lys Thr Pro Gln  
 210 215 220  
 Asp Val Gln Val His His Ile Asp Phe Gly Ile Glu Leu Gln Ser Leu  
 225 230 235 240  
 Leu Phe Phe Met Lys Asn Tyr Ser Lys  
 245

&lt;210&gt; 6345

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6345

Tyr Glu Lys Val Asn Ile Pro Thr Asn Arg Lys Arg Leu Glu Leu Met  
 1 5 10 15  
 Asn Leu Gly Val Arg Val Met Asn Leu Val Glu Leu Gln Gly Ser Thr  
 20 25 30  
 Arg Ala Glu Asn Glu Thr Arg Gly Arg Ala Leu Ile Ser Ser Glu Glu  
 35 40 45  
 Ser Phe Leu Ala Glu Gly Ile Asn  
 50 55

&lt;210&gt; 6346

&lt;211&gt; 530

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6346

Cys His Ser Leu Asn Leu Lys Val Leu Lys Asn Asn Asn Ile Arg Gly

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |
| Val | Phe | Leu | Met | Glu | Glu | His | Ile | Gln | Ile | Phe | Asp | Thr | Thr | Leu | Arg |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |
| Asp | Gly | Glu | Gln | Thr | Pro | Gly | Val | Asn | Phe | Thr | Phe | Asp | Glu | Arg | Leu |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |
| Lys | Ile | Ala | Lys | Gln | Leu | Glu | Lys | Trp | Gly | Val | Asp | Val | Leu | Glu | Ala |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |
| Gly | Phe | Pro | Ala | Ser | Ser | Thr | Gly | Ser | Phe | Lys | Ser | Val | Glu | Ala | Ile |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |
| Ala | Lys | Thr | Leu | Thr | Thr | Ala | Val | Cys | Gly | Leu | Ala | Arg | Cys | Lys |     |  |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |  |
| Lys | Ser | Asp | Ile | Asp | Ala | Val | Tyr | Glu | Ala | Thr | Lys | Glu | Ala | Ile | Lys |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |
| Pro | Gln | Val | His | Val | Phe | Ile | Ala | Thr | Ser | Pro | Ile | His | Leu | Glu | His |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |
| Lys | Leu | Lys | Met | Thr | Gln | Asp | Glu | Val | Leu | Thr | Ser | Ile | Lys | Glu | His |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |
| Val | Ser | Tyr | Ala | Lys | Gln | Phe | Phe | Glu | Val | Val | Gln | Phe | Ser | Pro | Glu |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |
| Asp | Ala | Thr | Arg | Thr | Glu | Ile | Pro | Phe | Leu | Ile | Glu | Cys | Val | Gln | Thr |  |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |
| Ala | Ile | Asn | Ala | Gly | Ala | Thr | Ile | Ile | Asn | Ile | Pro | Asp | Thr | Val | Gly |  |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |
| Phe | Ser | Tyr | Pro | Thr | Glu | Tyr | Gly | Glu | Ile | Phe | Lys | Gln | Leu | Thr | Gln |  |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |
| Ala | Val | Lys | Ser | Asn | Ser | Lys | Ile | Ile | Phe | Ser | Ala | His | Cys | His | Asp |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |
| Asp | Leu | Gly | Met | Ala | Val | Ala | Asn | Ser | Leu | Ala | Ala | Ile | Glu | Gly | Gly |  |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     |     | 240 |  |
| Ala | Arg | Arg | Ile | Glu | Gly | Thr | Val | Asn | Gly | Ile | Gly | Glu | Arg | Ala | Gly |  |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |  |
| Asn | Ala | Ser | Leu | Glu | Glu | Val | Ala | Leu | Ala | Leu | Tyr | Val | Arg | Lys | Asp |  |
|     |     | 260 |     |     |     |     |     | 265 |     |     |     |     | 270 |     |     |  |
| His | Tyr | Gly | Leu | Glu | Ser | Gln | Ile | Asn | Leu | Lys | Glu | Thr | Lys | Lys | Thr |  |
|     | 275 |     |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |
| Ser | Asp | Leu | Ile | Ser | Arg | Tyr | Ala | Gly | Ile | Arg | Val | Pro | Arg | Asn | Lys |  |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |  |
| Ala | Ile | Val | Gly | Gln | Asn | Ala | Phe | Ser | His | Glu | Ser | Gly | Ile | His | Gln |  |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |  |
| Asp | Gly | Val | Leu | Lys | His | Arg | Glu | Thr | Tyr | Glu | Ile | Met | Thr | Pro | Gln |  |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |  |
| Leu | Val | Gly | Val | Asn | Thr | Thr | Glu | Leu | Pro | Leu | Gly | Lys | Leu | Ser | Gly |  |
|     |     | 340 |     |     |     |     |     | 345 |     |     |     |     | 350 |     |     |  |
| Lys | His | Ala | Phe | Ala | Glu | Lys | Leu | Lys | Ala | Leu | Gly | Tyr | Glu | Ile | Lys |  |
|     | 355 |     |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |  |
| Leu | Glu | Asp | Gln | Val | Thr | Leu | Phe | Lys | Gln | Phe | Lys | Glu | Ile | Ala | Asp |  |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |  |
| Lys | Lys | Lys | Asn | Val | Ser | Asp | Arg | Asp | Ile | His | Ala | Ile | Ile | His | Gly |  |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |  |
| Ser | Glu | His | Glu | His | Asn | Ala | Ile | Phe | Gln | Leu | Asp | Asn | Leu | Gln | Leu |  |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |  |
| Gln | Tyr | Val | Ser | Lys | Gly | Leu | Gln | Ser | Ala | Val | Val | Val | Ile | Lys | Glu |  |
|     |     | 420 |     |     |     |     |     | 425 |     |     |     |     | 430 |     |     |  |
| Arg | Asn | Gly | Gln | Val | Lys | Gln | Asp | Ser | Ser | Ile | Gly | Thr | Gly | Ser | Ile |  |
|     | 435 |     |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |  |
| Val | Ala | Ile | Tyr | Asn | Ala | Val | Asp | Arg | Ile | Phe | Lys | Lys | Asp | Ala | Glu |  |

450                      455                      460  
 Leu Ile Asp Tyr Arg Ile Asp Ser Val Thr Glu Gly Thr Asp Ala Gln  
 465                      470                      475                      480  
 Ala Glu Val His Val Arg Ile Ile Ile Asn His Ile Glu Val Thr Gly  
                     485                      490                      495  
 Ile Gly Ile Asp His Asp Ile Leu Lys Ala Ser Cys Lys Ala Tyr Ile  
                     500                      505                      510  
 Asp Ala His Ala Lys Tyr Ile Ser Glu Tyr Glu Leu Lys Glu Gly Ile  
                     515                      520                      525  
 Arg Thr  
 530

<210> 6347

<211> 63

<212> PRT

<213> S.epidermidis

<400> 6347

Leu Phe Ser Ser Ile Ile Leu Val Ile Phe Ser Phe Val Ala Gly Leu  
 1                      5                      10                      15  
 Thr Asp Pro Leu Phe Lys Lys Arg Glu Thr Val Leu Phe Asp Thr Pro  
                     20                      25                      30  
 Ala Asn Phe Ala Ile Ser Asp Ile Phe Phe Ile Lys Asn His Leu Ser  
                     35                      40                      45  
 Arg His Gln Ser Phe Phe Phe Ile Leu Pro Tyr Glu Pro Thr Leu  
                     50                      55                      60

<210> 6348

<211> 339

<212> PRT

<213> S.epidermidis

<400> 6348

Leu Glu Glu Phe Ile Met Thr Lys Val Tyr Tyr Asp Glu Thr Val Thr  
 1                      5                      10                      15  
 Gln Asp Ala Leu Gln Gly Lys Lys Ile Ala Val Ile Gly Tyr Gly Ser  
                     20                      25                      30  
 Gln Gly His Ala His Ala Gln Asn Leu Lys Asp Asn Gly Tyr Asp Val  
                     35                      40                      45  
 Val Ile Gly Leu Arg Pro Gly Arg Ser Phe Asn Lys Ala Lys Glu Asp  
                     50                      55                      60  
 Gly Phe Asp Val Tyr Thr Val Ser Glu Ala Thr Gln Gln Ala Asp Val  
 65                      70                      75                      80  
 Val Met Val Leu Leu Pro Asp Glu Ile Gln Gly Glu Val Tyr Asn Lys  
                     85                      90                      95  
 Glu Ile Lys Pro Tyr Leu Glu Lys Gly Asn Ala Leu Ala Phe Ala His  
                     100                      105                      110  
 Gly Phe Asn Ile His Phe Ser Val Ile Glu Pro Pro Ser Asp Val Asp  
                     115                      120                      125  
 Val Phe Leu Val Ala Pro Lys Gly Pro Gly His Leu Val Arg Arg Thr  
                     130                      135                      140  
 Phe Val Glu Gly Ser Ala Val Pro Ala Leu Phe Gly Val Gln Gln Asp  
 145                      150                      155                      160  
 Ala Thr Gly Gln Ala Arg Asn Ile Ala Leu Ser Tyr Ala Lys Gly Ile  
                     165                      170                      175  
 Gly Ala Thr Arg Ala Gly Val Ile Glu Thr Thr Phe Lys Glu Glu Thr





Tyr Phe Met  
225

<210> 6350  
<211> 82  
<212> PRT  
<213> S.epidermidis

<400> 6350  
Arg Leu Lys Ser Tyr Arg Phe His Ser Ala Thr Ser Leu Lys Leu Phe  
1 5 10 15  
Asn Phe Ile Ile Ser Leu Gln Phe Thr Tyr Ser Ala Asn Val Leu  
20 25 30  
Ser Thr Ser Lys Leu Met Leu Cys Phe Tyr Ser Leu Ala Thr Leu Ile  
35 40 45  
Thr Cys Leu Pro Lys Leu Ser Pro Val Ser Arg Phe Leu Lys Ala Cys  
50 55 60  
Gly Thr Leu Ser Lys Pro Ser Ser Thr Glu Thr Cys Val Leu Ile Leu  
65 70 75 80  
Phe Ser

<210> 6351  
<211> 326  
<212> PRT  
<213> S.epidermidis

<400> 6351  
Arg Gly Glu Ser His Met Ile Lys Gln Asn Leu Lys Met Arg Tyr Thr  
1 5 10 15  
Ile Val Leu Leu Leu Leu Ile Phe Ser Thr Ile Phe Ser Leu Cys Ile  
20 25 30  
Gly Ser Val Met Ile Asn Pro Ile His Ala Val Thr Gly Phe Phe Leu  
35 40 45  
His Asn Asp Phe Ile Leu Asn Glu Tyr Arg Ile Pro Arg Thr Leu Leu  
50 55 60  
Gly Leu Leu Ile Gly Ser Ser Leu Ala Ile Ser Gly Ser Val Ile Gln  
65 70 75 80  
Gly Val Ile Arg Asn Pro Leu Ala Ser Pro Asp Val Ile Gly Ile Thr  
85 90 95  
Lys Gly Ala Ser Leu Ala Ala Val Met Ile Ile Met Ile Phe Pro Ser  
100 105 110  
Ala Pro Leu Phe Val Leu Pro Leu Gly Ser Phe Ile Gly Ala Leu Thr  
115 120 125  
Ile Ser Ile Ile Leu Ser Val Leu Ile Ser Lys Phe Asp Val Lys Gly  
130 135 140  
Ser Lys Leu Ala Leu Ile Gly Leu Ala Ile Gly Ala Ile Cys Thr Ala  
145 150 155 160  
Ile Val Gln Phe Leu Leu Ile Arg Asn Pro Leu Asp Ala Asn Asn Ala  
165 170 175  
Leu Leu Trp Leu Thr Gly Ser Leu Tyr Gly His Asn Ile Val Asn Phe  
180 185 190  
Tyr Ser Leu Leu Pro Trp Phe Ile Ile Thr Val Pro Ile Val Leu Leu  
195 200 205  
Leu Gly Tyr Gln Leu Asp Ile Leu Asn Leu Gly Asp His Val Ala Ile  
210 215 220

6350 6351 6352 6353 6354 6355 6356 6357 6358 6359 6360 6361 6362 6363 6364 6365 6366 6367 6368 6369 6370 6371 6372 6373 6374 6375 6376 6377 6378 6379 6380 6381 6382 6383 6384 6385 6386 6387 6388 6389 6390 6391 6392 6393 6394 6395 6396 6397 6398 6399

Ala Leu Gly Ala Arg Val Lys Ile Leu Lys Met Ile Leu Leu Val Leu  
 225 230 235 240  
 Ala Val Met Leu Ala Gly Ala Ser Ile Ala Val Val Gly Gly Ile Ser  
 245 250 255  
 Phe Leu Gly Leu Ile Ala Pro His Ile Ala Arg Gln Leu Val Gly His  
 260 265 270  
 Lys Asn Ile His Val Ile Ile Met Ser Gly Leu Val Gly Ala Ile Leu  
 275 280 285  
 Leu Thr Phe Gly Asp Gly Leu Ala Arg Gly Ile Gln Pro Pro Leu Asp  
 290 295 300  
 Ile Pro Val Gly Val Val Ile Ala Ile Ile Gly Ala Pro Tyr Phe Leu  
 305 310 315 320  
 Phe Leu Leu Arg Lys Met  
 325

<210> 6352

<211> 335

<212> PRT

<213> S.epidermidis

<400> 6352

Gly Val Glu Ser Val Arg Gly Leu Lys Ile Leu Ser Val Ile Gly Leu  
 1 5 10 15  
 Leu Phe Val Leu Ile Ala Thr Ala Ala Cys Gly Asn Asn Ser Ser Ser  
 20 25 30  
 Asn Ser Ser Lys Glu Ser Ser Lys Asp Gly Val Glu Ile Lys His Glu  
 35 40 45  
 Glu Gly Thr Thr Lys Val Pro Lys His Pro Lys Arg Val Val Val Leu  
 50 55 60  
 Glu Tyr Ser Phe Val Asp Ala Leu Val Ala Leu Asp Val Lys Pro Val  
 65 70 75 80  
 Gly Ile Ala Asp Asp Asn Lys Lys Asn Arg Ile Ile Lys Pro Leu Arg  
 85 90 95  
 Asp Lys Ile Gly Lys Tyr Thr Ser Val Gly Thr Arg Lys Gln Pro Asn  
 100 105 110  
 Leu Glu Glu Ile Ser Lys Leu Lys Pro Asp Leu Ile Ile Ala Asp Asn  
 115 120 125  
 Asn Arg His Lys Gly Ile Tyr Lys Asp Leu Asn Lys Ile Ala Pro Thr  
 130 135 140  
 Ile Glu Leu Lys Ser Phe Asp Gly Asp Tyr Asn Glu Asn Ile Asp Ala  
 145 150 155 160  
 Phe Lys Thr Ile Ser Lys Ala Leu Gly Lys Glu Glu Glu Gly Lys Lys  
 165 170 175  
 Arg Leu Glu Glu His Asp Lys Lys Ile Glu Glu Tyr Lys Lys Glu Ile  
 180 185 190  
 Thr Met Asp Lys Asn Gln Lys Val Leu Pro Ala Val Ala Lys Ser  
 195 200 205  
 Gly Leu Leu Ala His Pro Ser Asn Ser Tyr Val Gly Gln Phe Leu Ser  
 210 215 220  
 Gln Leu Gly Phe Lys Glu Ala Leu Ser Asp Asp Val Thr Lys Gly Leu  
 225 230 235 240  
 Ser Lys Tyr Leu Lys Gly Pro Tyr Leu Gln Met Asn Thr Glu Thr Leu  
 245 250 255  
 Ser Gln Val Asn Pro Glu Arg Met Phe Ile Met Thr Asn Lys Ala Ser  
 260 265 270  
 Ser Asn Glu Pro Ser Leu Lys Glu Leu Glu Lys Asp Pro Val Trp Lys

|                         |                         |                     |
|-------------------------|-------------------------|---------------------|
| 275                     | 280                     | 285                 |
| Lys Leu Asn Ala Val     | Lys Asn Gln Arg Val Asp | Ile Leu Asp Arg Asp |
| 290                     | 295                     | 300                 |
| Leu Trp Ala Arg Ser     | Arg Gly Leu Ile Ser Ser | Glu Glu Met Ala Lys |
| 305                     | 310                     | 315                 |
| Glu Leu Val Glu Leu Ser | Lys Lys Asp Ser Lys     | Lys Asp Asn Lys     |
| 325                     | 330                     | 335                 |

<210> 6353  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

|   |
|---|
| <400> 6353  |
| Ile Gln Asn Pro Tyr Ser Cys Ser Lys Ile Lys His Val Lys Ser Val |
| 1 5 10 15   |
| Glu Phe Leu Asp Glu Thr Phe Leu Ile Leu Gly His Ser Ile Val Leu |
| 20 25 30  |
| Lys Lys Leu Glu Tyr Asp Ala Phe                                 |
| 35 40   |

<210> 6354  
 <211> 314  
 <212> PRT  
 <213> S.epidermidis

|   |
|---|
| <400> 6354  |
| Gly Arg Cys Pro Met Ile Leu Thr Leu Thr Leu Asn Pro Ser Val Asp |
| 1 5 10 15   |
| Ile Ser Tyr Pro Leu Asp Gln Phe Asn Leu Asp Thr Val Asn Arg Val |
| 20 25 30  |
| Ser Gln Thr Ser Lys Thr Ala Gly Gly Lys Gly Leu Asn Val Thr Arg |
| 35 40 45  |
| Val Leu Ser Glu Phe Gly Glu Asp Val Ile Ala Ser Gly Phe Leu Gly |
| 50 55 60  |
| Gly Ala Leu Gly Gln Tyr Ile Glu Glu Gln Ile Glu Thr Thr Arg Ile |
| 65 70 75 80   |
| Lys Gln Ala Phe Phe Lys Ile Lys Gly Glu Thr Arg Asn Cys Ile Ala |
| 85 90 95  |
| Ile Leu His Glu Gly Gln Gln Thr Glu Ile Leu Glu Lys Gly Pro Thr |
| 100 105 110   |
| Ile Glu Leu Lys Glu Ser Glu Glu Phe Lys Ser His Leu Leu Lys Leu |
| 115 120 125   |
| Phe Lys Glu Thr Asp Val Ala Val Met Ser Gly Ser Leu Pro Lys Gly |
| 130 135 140   |
| Leu Asn Thr Asp Tyr Tyr Ala Asp Ile Val Arg Leu Ala Lys Glu Gln |
| 145 150 155 160   |
| Gly Ile Leu Thr Ile Leu Asp Ser Ser Gly Gln Ser Leu Glu Glu Val |
| 165 170 175   |
| Leu Ile Ser Asn Val Lys Pro Thr Val Ile Lys Pro Asn Ile Asp Glu |
| 180 185 190   |
| Leu Ser Gln Leu Leu Asn Tyr Lys Val Thr Asn Asp Ile Lys Glu Leu |
| 195 200 205   |
| Lys Ala Ala Val Ser Gln Pro Ile Phe Asn Asp Ile Glu Trp Ile Ile |
| 210 215 220   |
| Val Ser Leu Gly Ser Glu Gly Ala Phe Ala Lys His Asn Gln Lys Phe |

225                      230                      235                      240  
 Tyr Lys Val Asn Ile Pro Asn Ile Lys Val Val Asn Pro Val Gly Ser  
                                  245                      250                      255  
 Gly Asp Ser Thr Val Ala Gly Ile Ala Ser Gly Leu Ile His Gln Gln  
                                  260                      265                      270  
 Thr Asp Glu Glu Leu Leu Lys Lys Ala Asn Ala Phe Gly Met Leu Asn  
                                  275                      280                      285  
 Ala Met Glu Gln Gln Thr Gly His Ile Asn Thr Asp Lys Phe Asp Glu  
                                  290                      295                      300  
 Ile Phe Lys Gln Ile Glu Val Ile Glu Val  
 305                      310

<210> 6355  
 <211> 121  
 <212> PRT  
 <213> S.epidermidis

<400> 6355  
 Tyr Pro Ser Pro Tyr Cys Leu Leu Val Ile Lys Thr Pro Thr Val Pro  
 1                      5                      10                      15  
 Ser Pro Ile Asn Glu Ala Arg Leu Ser Thr Val Asp Leu Pro Gly Lys  
                                  20                      25                      30  
 Val Asn Lys Gly Arg Met Ile Gly Leu Lys Met Gly Pro Ser Asn Ser  
                                  35                      40                      45  
 Asn Arg Pro Tyr Ser Ile Asn Lys Gly Lys Lys Ile Ala Ala Asn Lys  
                                  50                      55                      60  
 Asn Thr Ala Thr Arg Val Gly Asn Lys Leu Glu Asn Thr Asn Pro Pro  
 65                      70                      75                      80  
 Val Ser Ser Asp Leu Ile Ile Ser Gly Pro Ile Phe Lys Asn Val Asn  
                                  85                      90                      95  
 Gln Glu Lys Lys Thr Ala Asn Thr Leu Lys Thr Ser His Pro Ile Leu  
                                  100                      105                      110  
 Thr Leu Lys Ala Leu Leu Ile Lys Pro  
                                  115                      120

<210> 6356  
 <211> 100  
 <212> PRT  
 <213> S.epidermidis

<400> 6356  
 Arg Leu Pro Pro Thr Tyr Tyr Arg Gly Cys Trp His Val Val Ser Arg  
 1                      5                      10                      15  
 Gly Phe Leu Ile Arg Tyr Arg Gln Asp Val His Ser Tyr Leu His Ile  
                                  20                      25                      30  
 Cys Ser Ser Leu Ile Thr Glu Phe Tyr Asp Pro Lys Thr Phe Ile Thr  
                                  35                      40                      45  
 His Ala Ala Leu Leu Arg Gln Ala Phe Ala His Cys Gly Arg Phe Pro  
                                  50                      55                      60  
 Thr Ala Ala Ser Arg Arg Ser Leu Asp Arg Val Ser Val Pro Val Trp  
 65                      70                      75                      80  
 Pro Ile Thr Leu Ser Gly Arg Leu Arg Ile Val Ala Leu Val Ser Arg  
                                  85                      90                      95  
 Tyr Pro Thr Asn  
                                  100

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<210> 6357  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

<400> 6357  
 Phe Val Thr Phe Arg Tyr Cys Leu Leu Glu Leu Thr Ser Thr Tyr Cys  
 1 5 10 15  
 His Ser Val Phe Asn Val His Leu Val Lys Ser Ile Phe Phe Ile Val  
 20 25 30  
 Leu Tyr Cys Phe Lys Lys Ser Gln  
 35 40

<210> 6358  
 <211> 359  
 <212> PRT  
 <213> S.epidermidis

<400> 6358  
 Gly Gly Phe Thr Leu Leu Thr Val Asn Gln Val Lys Glu Ile Val Gly  
 1 5 10 15  
 Ala Leu Lys Asp Pro Ile Ile Asp Val Pro Leu Arg Glu Ser Glu Gly  
 20 25 30  
 Ile Val Asp Val Ser Ile Lys Asp Asn Ile Asn His Val Ser Val Lys  
 35 40 45  
 Val Ala Met Ala Gln Leu Gly Gly Gln Pro Gln Leu Asp Leu Gln Met  
 50 55 60  
 Ala Ile Val Lys Ala Leu Lys Glu Asn Gly Ala Asn Thr Val Gly Ile  
 65 70 75 80  
 Arg Phe Glu Glu Leu Pro Ser Glu Val Val Glu Arg Tyr Ile Gly Lys  
 85 90 95  
 Gly Ser Glu Lys Pro Lys Thr Ile Glu Glu Leu Leu Ser Gln Asn Asn  
 100 105 110  
 Pro Val Glu Phe Ile Ser Ile Ala Ser Gly Lys Gly Gly Val Gly Lys  
 115 120 125  
 Ser Thr Val Ala Val Asn Leu Ala Val Ala Leu Ala Arg Glu Gly Lys  
 130 135 140  
 Lys Val Gly Leu Val Asp Ala Asp Ile Tyr Gly Phe Ser Val Pro Asp  
 145 150 155 160  
 Met Met Gly Ile Asp Glu Arg Pro Gly Ile Asp Gly Lys Glu Ile Ile  
 165 170 175  
 Pro Val Glu Arg His Gly Val Lys Val Ile Ser Met Ala Phe Phe Val  
 180 185 190  
 Glu Glu Asn Ala Pro Val Ile Trp Arg Gly Pro Met Leu Gly Lys Met  
 195 200 205  
 Leu Thr Asn Phe Phe Thr Glu Val Gln Trp Gly Glu Leu Asp Tyr Leu  
 210 215 220  
 Leu Leu Asp Leu Pro Pro Gly Thr Gly Asp Val Ala Leu Asp Val His  
 225 230 235 240  
 Ser Met Leu Pro Ser Ser Lys Glu Ile Ile Val Thr Thr Pro His Pro  
 245 250 255  
 Thr Ala Ala Phe Val Ala Ala Arg Ala Gly Ala Met Ala Lys His Thr  
 260 265 270  
 Glu His Thr Ile Leu Gly Val Ile Glu Asn Met Ser Tyr Phe Glu Ser  
 275 280 285  
 Lys Glu Thr Gly Lys Lys Glu Tyr Val Phe Gly Lys Gly Gly Gly Lys

290                      295                      300  
 Lys Leu Ser Asp Glu Leu Glu Thr Gln Leu Phe Ala Glu Leu Pro Leu  
 305                      310                      315                      320  
 Glu Gln Pro Thr Trp Asn Pro Asn Asp Phe Ser Pro Ser Ile Tyr Gln  
                     325                      330                      335  
 Ser Asp Asp Arg Leu Gly Glu Leu Tyr Thr Leu Ile Ala Arg Lys Val  
                     340                      345                      350  
 Ile Val Ser Thr Gln Lys Gln  
                     355

<210> 6359  
 <211> 221  
 <212> PRT  
 <213> S.epidermidis

<400> 6359  
 Gly Gly Asn Thr Val Gly Gln Lys Ile Asn Pro Ile Gly Leu Arg Val  
 1                      5                      10                      15  
 Gly Val Ile Arg Asp Trp Glu Ala Lys Trp Tyr Ala Glu Lys Asp Phe  
                     20                      25                      30  
 Ala Ser Leu Leu His Glu Asp Leu Lys Ile Arg Lys Phe Ile Asp Asn  
                     35                      40                      45  
 Glu Leu Lys Glu Ala Ser Val Ser His Val Asp Ile Glu Arg Ala Ala  
                     50                      55                      60  
 Asn Arg Ile Asn Ile Ala Ile His Thr Gly Lys Pro Gly Met Val Ile  
 65                      70                      75                      80  
 Gly Lys Gly Gly Ser Glu Ile Glu Lys Leu Arg Asn Lys Leu Asn Thr  
                     85                      90                      95  
 Leu Thr Asp Lys Lys Val His Ile Asn Val Ile Glu Ile Lys Lys Ile  
                     100                      105                      110  
 Asp Ile Asp Ala Arg Leu Val Ala Glu Asn Ile Ala Arg Gln Leu Glu  
                     115                      120                      125  
 Asn Arg Ala Ser Phe Arg Arg Val Gln Lys Gln Ala Ile Thr Arg Ala  
                     130                      135                      140  
 Met Lys Asn Gly Ala Lys Gly Ile Lys Thr Gln Val Ser Gly Arg Leu  
 145                      150                      155                      160  
 Gly Gly Ala Asp Ile Ala Arg Ala Glu Gln Tyr Ser Glu Gly Thr Val  
                     165                      170                      175  
 Pro Leu His Thr Leu Arg Ala Asp Ile Asp Tyr Ala His Ala Glu Ala  
                     180                      185                      190  
 Asp Thr Thr Tyr Gly Lys Leu Gly Val Lys Val Trp Ile Tyr Arg Gly  
                     195                      200                      205  
 Glu Val Leu Pro Thr Lys Asn Thr Ser Glu Gly Gly Lys  
                     210                      215                      220

<210> 6360  
 <211> 83  
 <212> PRT  
 <213> S.epidermidis

<400> 6360  
 Gly Arg Asp Thr Met Ala Asp Asn Asn Asn Gln Asn Gly Gln Asp Ala  
 1                      5                      10                      15  
 Thr Gln Gln Phe Ile Asn Ile Leu Lys Ser Phe Lys Trp Arg Ile Ile  
                     20                      25                      30  
 Gly Phe Leu Ala Phe Leu Ile Ile Ala Ile Leu Phe Leu Thr Leu Gly

35 40 45  
 Phe Trp Lys Thr Ile Leu Ile Ile Val Leu Cys Leu Ile Gly Ile Gly  
 50 55 60  
 Ile Gly Tyr Ile Lys Asp Arg Thr Gln Asp Phe Leu Asn Phe Leu Asn  
 65 70 75 80  
 Arg Trp Ser

<210> 6361  
 <211> 187  
 <212> PRT  
 <213> S.epidermidis

<400> 6361  
 Leu Ser Trp Phe Leu Val Phe Phe Tyr Asn Val Asn Thr Phe His Asn  
 1 5 10 15  
 Asp Thr Val Phe Phe Trp Phe Ser Ser Tyr Tyr Phe Thr Phe Phe Thr  
 20 25 30  
 Phe Val Phe Thr Cys Asp Asn Phe Tyr Val Val Thr Phe Phe Asp Met  
 35 40 45  
 His Val Gly Thr Ser Leu Asn Tyr Val Asn Leu Phe Asp Trp Tyr Tyr  
 50 55 60  
 Ser Thr Ser Gly Ala Ser Asp Thr Ile Phe Met Lys Phe Pro Ser Arg  
 65 70 75 80  
 Asn Ser Arg Ala Thr Gly Pro Lys Ile Arg Val Pro Arg Gly Pro Leu  
 85 90 95  
 Ser Ser Arg Met Ile Thr His Ala Phe Ser Ser Asn Leu Ile Tyr Glu  
 100 105 110  
 Pro Ser Ser Arg Arg Thr Pro Asp Phe Val Arg Thr Thr Ala Phe  
 115 120 125  
 Thr Thr Ser Pro Phe Leu Thr Thr Pro Pro Gly Val Ala Phe Leu Thr  
 130 135 140  
 Val His Thr Ile Ile Ser Pro Met Phe Ala Val Leu Arg Pro Asp Pro  
 145 150 155 160  
 Pro Asn Thr Leu Ile Val Arg Thr Ser Arg Ala Pro Glu Leu Ser Ala  
 165 170 175  
 Thr Phe Lys Arg Val Ser Cys Trp Ile Ile Arg  
 180 185

<210> 6362  
 <211> 50  
 <212> PRT  
 <213> S.epidermidis

<400> 6362  
 Ile Thr Trp Phe Arg Val Tyr Asp Gln Ile Leu Asn Ala Leu Phe Arg  
 1 5 10 15  
 Leu Ala Phe Ala Ala Ala Pro His Leu Leu Leu Asn Leu Ala Ser Asp  
 20 25 30  
 Arg Asn Ser Pro Val His Ser Thr Lys Gly Thr Pro Ser Pro Ile Asn  
 35 40 45  
 Gly Leu  
 50

<210> 6363  
 <211> 171



&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6363

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Arg Arg Asp Thr Phe Met Ala Arg Arg Glu Glu Glu Thr Lys Glu Phe
1      5      10      15
Glu Glu Arg Val Val Thr Ile Asn Arg Val Ala Lys Val Val Lys Gly
20      25      30
Gly Arg Arg Phe Arg Phe Thr Ala Leu Val Val Val Gly Asp Lys Asn
35      40      45
Gly Arg Val Gly Phe Gly Thr Gly Lys Ala Gln Glu Val Pro Glu Ala
50      55      60
Ile Lys Lys Ala Val Glu Ala Ala Lys Lys Asp Leu Val Val Val Pro
65      70      75      80
Arg Val Glu Gly Thr Thr Pro His Thr Ile Thr Gly Gln Tyr Gly Ser
85      90      95
Gly Ser Val Phe Met Lys Pro Ala Ala Pro Gly Thr Gly Val Ile Ala
100     105     110
Gly Gly Pro Val Arg Ala Val Leu Glu Leu Ala Gly Ile Thr Asp Ile
115     120     125
Leu Ser Lys Ser Leu Gly Ser Asn Thr Pro Ile Asn Met Val Arg Ala
130     135     140
Thr Ile Asn Gly Leu Gln Asn Leu Lys Asn Ala Glu Asp Val Ala Lys
145     150     155     160
Leu Arg Gly Lys Ser Val Glu Glu Leu Tyr Asn
165     170

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&lt;210&gt; 6364

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6364

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Phe Ile Arg Thr Ala Ile Met Asn Glu Ala Phe Ile Phe Arg Arg Thr
1      5      10      15
Ile Ile Met Arg Gln Thr Phe Met Ala Asn Glu Ser Asn Ile Glu Arg
20      25      30
Lys Trp Tyr Val Ile Asp Ala Glu Gly Gln Thr Leu Gly Arg Leu Ser
35      40      45
Ser Glu Val Ala Ala Ile Leu Arg Gly Lys Asn Lys Val Thr Tyr Thr
50      55      60
Pro His Val Asp Thr Gly Asp Tyr Val Ile Ile Ile Asn Ala Ser Lys
65      70      75      80
Ile Glu Phe Thr Gly Asn Lys Glu Gln Asp Lys Met Tyr Tyr Arg His
85      90      95
Ser Asn His Pro Gly Gly Leu Lys Ser Ile Ser Ala Gly Glu Leu Lys
100     105     110
Arg Thr Asn Pro Glu Arg Leu Leu Glu Thr Ser Ile Lys Gly Met Leu
115     120     125
Pro Ser Thr Arg Leu Gly Glu Lys Gln Gly Lys Lys Leu Phe Val Tyr
130     135     140
Gly Gly Ala Glu His Pro His Ala Ala Gln Gln Pro Glu Asn Tyr Glu
145     150     155     160
Leu Arg Gly

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6363  
 6364  
 163  
 PRT  
 S.epidermidis  
 6364  
 163  
 PRT  
 S.epidermidis  
 6364

<210> 6365  
 <211> 340  
 <212> PRT  
 <213> S.epidermidis

<400> 6365

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Arg Gly Gly Thr Met Lys Ala Ile Gly Phe Lys Ser Ser Phe Gln Leu
1      5      10      15
Asp Glu Gly Asn Cys Phe Glu Glu Phe Asn Phe Asp Ile Pro His Pro
20     25     30
Ser Gly His Glu Leu Leu Val Lys Val Gln Ser Ile Ser Val Asn Pro
35     40     45
Val Asp Thr Lys Gln Arg Thr Met Pro Val Asp Lys Ala Pro Arg Val
50     55     60
Leu Gly Phe Asp Ala Val Gly Val Ile Glu Lys Ile Gly Asp Gln Val
65     70     75     80
Ser Met Phe Gln Glu Gly Asp Val Val Phe Tyr Ser Gly Ser Pro Asn
85     90     95
Gln Asn Gly Ser Asn Glu Glu Tyr Gln Leu Ile Glu Glu Tyr Leu Val
100    105    110
Ala Lys Ala Pro Thr Asn Leu Lys Ser Glu Gln Ala Ala Ser Leu Pro
115    120    125
Leu Thr Gly Leu Thr Ala Tyr Glu Thr Leu Phe Asp Val Phe Gly Ile
130    135    140
Ser Lys Glu Pro Ser Glu Asn Lys Gly Lys Ser Leu Leu Ile Ile Asn
145    150    155    160
Gly Ala Gly Gly Val Gly Ser Ile Ala Thr Gln Ile Ala Lys Phe Tyr
165    170    175
Gly Leu Lys Val Ile Thr Thr Ala Ser Arg Glu Asp Thr Ile Lys Trp
180    185    190
Ser Val Asn Met Gly Ala Asp Val Val Leu Asn His Lys Lys Asp Leu
195    200    205
Ser Gln Gln Phe Lys Asp Asn His Ile Glu Gly Val Asp Tyr Ile Phe
210    215    220
Cys Thr Phe Asp Thr Asp Met Tyr Tyr Glu Met Met Val Asn Leu Val
225    230    235    240
Lys Pro Arg Gly His Ile Ala Thr Ile Val Ala Phe Asn Ser Gln Gln
245    250    255
Asp Leu Asn Leu Leu Lys Ser Lys Ser Val Thr Phe Thr His Glu Phe
260    265    270
Met Phe Ser Arg Pro Leu His His Thr Asp Asp Val Ile Lys His His
275    280    285
Glu Tyr Leu Lys Asp Ile Thr Glu Lys Val Glu Gln Gly Tyr Tyr Gln
290    295    300
Pro Thr Thr Thr Lys Val Ile Asp Gly Leu Asp Val Asp Ser Leu Tyr
305    310    315    320
Glu Ala His Gln Ile Leu Glu Ser His Ser Met Ile Gly Lys Leu Val
325    330    335
Ile Asn Leu Lys
340

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<210> 6366  
 <211> 41  
 <212> PRT  
 <213> S.epidermidis

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Leu Val Phe Thr Leu Ser Ile Lys  
35 40

<210> 6370

<211> 123

<212> PRT

<213> S.epidermidis

<400> 6370

Ile Asn Met Ala Arg Ile Ala Gly Val Asp Ile Pro Arg Glu Lys Arg  
1 5 10 15  
Ile Val Ile Ser Leu Thr Tyr Val Tyr Gly Ile Gly Thr Ser Thr Ala  
20 25 30  
Asn Lys Ile Val Glu Glu Ala Asn Val Ser Ala Asp Thr Arg Val Lys  
35 40 45  
Asp Leu Thr Asp Asp Glu Leu Gly Arg Ile Arg Glu Val Val Asp Gly  
50 55 60  
Tyr Lys Val Glu Gly Asp Leu Arg Arg Glu Gln Asn Leu Asn Ile Lys  
65 70 75 80  
Arg Leu Met Glu Ile Ser Ser Tyr Arg Gly Ile Arg His Arg Arg Gly  
85 90 95  
Leu Pro Val Arg Gly Gln Lys Thr Lys Asn Asn Ala Arg Thr Arg Lys  
100 105 110  
Gly Pro Val Lys Thr Val Ala Asn Lys Lys Lys  
115 120

<210> 6371

<211> 279

<212> PRT

<213> S.epidermidis

<400> 6371

Ala Thr Met Ala Leu Lys Lys Tyr Lys Pro Ile Thr Asn Gly Arg Arg  
1 5 10 15  
Asn Met Thr Thr Leu Asp Phe Ala Glu Ile Thr Lys Thr Thr Pro Glu  
20 25 30  
Lys Ser Leu Leu Gln Pro Leu Pro Lys Arg Ala Gly Arg Asn Asn Gln  
35 40 45  
Gly Lys Leu Thr Val Arg His His Gly Gly Gly His Lys Arg Gln Tyr  
50 55 60  
Arg Val Ile Asp Phe Lys Arg Asn Lys Asp Gly Ile Thr Ala Lys Val  
65 70 75 80  
Asp Ser Ile Gln Tyr Asp Pro Asn Arg Ser Ala Asn Ile Ala Leu Leu  
85 90 95  
Val Tyr Ala Asp Gly Glu Lys Arg Tyr Ile Ile Ala Pro Lys Gly Leu  
100 105 110  
Gln Ile Gly Gln Thr Val Glu Ser Gly Ala Glu Ala Asp Ile Lys Val  
115 120 125  
Gly Asn Ala Leu Pro Leu Gln Asn Ile Pro Val Gly Thr Val Ile His  
130 135 140  
Asn Ile Glu Leu Lys Pro Gly Lys Gly Gly Gln Leu Ala Arg Ser Ala  
145 150 155 160  
Gly Ala Ser Ser Gln Val Leu Gly Lys Glu Gly Lys Tyr Val Leu Ile  
165 170 175  
Arg Leu Arg Ser Gly Glu Val Arg Met Ile Leu Ser Thr Cys Arg Ala  
180 185 190



290                      295                      300  
 Glu Leu Asn Glu Lys Leu Ile Leu Ile Ser Asn His Ser Val Pro Tyr  
 305                      310                      315                      320  
 Tyr Ala Gly Leu Ser Phe Arg Thr Leu Val Pro Lys Gln Pro Asp Leu  
                          325                      330                      335  
 Ser Pro His Ile Lys Leu Ser Thr Asn Val His Ile Thr Gly Glu Ile  
                          340                      345                      350  
 Arg Thr Leu Ser Glu Gln Thr Thr Tyr Asn Gly Pro Leu Val Thr Gln  
                          355                      360                      365  
 Ile Leu Arg Glu Ile Met Ser Lys Asp Glu Asp Phe Ser His Tyr Gln  
                          370                      375                      380  
 Ser Thr Tyr Ile Asp Glu Asn Ala Gly Ile His Phe Tyr Asn Arg Asn  
 385                      390                      395                      400  
 Asp Asn Glu Ala Ile Gln Thr Asp Arg Ser Glu Gln Leu Gly Thr Leu  
                          405                      410                      415  
 Phe Arg Asn Asn Leu Tyr Gln Phe Ile Ser Asn Glu Thr Val Pro Val  
                          420                      425                      430  
 Ile Pro Ser Ser Leu Val Ala Thr Tyr Pro Tyr Asn Thr Glu Ala Pro  
                          435                      440                      445  
 Ile Cys Thr Leu Ile Lys Thr Tyr Gln Asn Thr Tyr Gln Tyr Lys Asn  
                          450                      455                      460  
 Tyr Glu Glu Ala Ala Lys Gln Trp Ile Lys Asp Tyr Ser Lys Ala Leu  
 465                      470                      475                      480  
 Leu Gly Leu Val Ile Pro Leu Tyr Ser Lys Tyr Gly Ile Ser Leu Glu  
                          485                      490                      495  
 Ala His Leu Gln Asn Ser Val Ala Thr Phe Asn Lys Asp Gly Ser Leu  
                          500                      505                      510  
 Asn Met Ile Tyr Ile Arg Asp Phe Glu Gly Leu Arg Ile Asp Asn Glu  
                          515                      520                      525  
 Gln Leu Asn Asn Ala Gly Phe Thr Thr Arg His Phe His Glu Lys Ser  
                          530                      535                      540  
 Arg Ile Leu Thr Asn Ser Lys Thr Ser Val Phe Asn Lys Met Phe Tyr  
 545                      550                      555                      560  
 Ser Thr Val Gln Asn His Leu Gly Glu Leu Val Ile Thr Ile Ala Lys  
                          565                      570                      575  
 Tyr Ser Asn Ser Lys Val Leu Glu Gln Glu Ile Trp Gln Ile Ile Ser  
                          580                      585                      590  
 Gln Thr Val Glu Asp Ile Phe Asn His Met Thr His Ile Ser Lys Gln  
                          595                      600                      605  
 His Leu Asn Asn Ile Lys Arg Thr Ile Phe Ala Ser Glu Ile Asp Tyr  
                          610                      615                      620  
 Lys Cys Val Thr Thr Met Arg Leu Glu Asp Gln Ala His Glu Tyr Thr  
 625                      630                      635                      640  
 Tyr Ile Lys Val His Asn Pro Leu His Arg Lys Asn Asp Leu  
                          645                      650

&lt;210&gt; 6373

&lt;211&gt; 492

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6373

Ile Trp Asn Tyr His Leu Asn Lys Lys Glu Tyr Met Phe Met Ala Ser  
 1                      5                      10                      15  
 Tyr Glu Leu Ser Lys Thr Lys Arg Asn Leu Ile Val Ser Val Met Leu  
                          20                      25                      30



Glu Pro Asn His Leu Thr His Asn Ser Arg Lys Val  
 485 490

<210> 6374

<211> 123

<212> PRT

<213> S.epidermidis

<400> 6374

Leu Met Gly Tyr Arg Lys Leu Gly Arg Thr Ser Asp Gln Arg Lys Ala  
 1 5 10 15  
 Met Leu Arg Asp Leu Ala Thr Ser Leu Ile Val Ser Glu Arg Ile Glu  
 20 25 30  
 Thr Thr Glu Ala Arg Ala Lys Glu Val Arg Ser Val Val Glu Lys Leu  
 35 40 45  
 Ile Thr Leu Gly Lys Lys Gly Asp Leu Ala Ser Arg Arg Asn Ala Ala  
 50 55 60  
 Lys Thr Leu Arg Asn Val Glu Ile Leu Asn Glu Asp Asp Ser Thr Gln  
 65 70 75 80  
 Thr Ala Leu Gln Lys Leu Phe Gly Glu Ile Ala Glu Arg Tyr Ser Glu  
 85 90 95  
 Arg Gln Gly Gly Tyr Thr Arg Ile Leu Lys Val Gly Pro Arg Arg Gly  
 100 105 110  
 Asp Gly Ala Glu Ser Val Ile Ile Glu Leu Val  
 115 120

<210> 6375

<211> 404

<212> PRT

<213> S.epidermidis

<400> 6375

Asn Tyr Val Tyr Ile Arg Ser Val Ile Met Leu Asp Lys Asn Gln Leu  
 1 5 10 15  
 Glu Lys Tyr Asn Gln Glu His Leu Tyr Glu Tyr Glu Lys Leu Met Ser  
 20 25 30  
 Ser Asn Glu Lys Asn Ala Leu Asp Glu Lys Val Asp Gln Leu Asn Leu  
 35 40 45  
 Ala Glu Ile Gln Asp Leu Tyr Gln Asp Leu Tyr Val Asn Arg Lys Thr  
 50 55 60  
 Ile Asp Asp Val Ser Ser Val Ser Glu Val Lys Tyr Glu Val Lys Ser  
 65 70 75 80  
 Arg Leu Asn Glu Glu Glu Arg His Thr Tyr Glu Gln Lys Gly Tyr Glu  
 85 90 95  
 Ala Ile Arg Asn Gly Glu Phe Ala Val Leu Leu Met Ala Gly Gly Gln  
 100 105 110  
 Gly Thr Arg Leu Gly Tyr Lys Gly Pro Lys Gly Ser Phe Glu Ile Glu  
 115 120 125  
 Gly Thr Ser Leu Phe Glu Leu Gln Ala Arg Gln Leu Ile Arg Leu Lys  
 130 135 140  
 Glu Glu Thr Gly His Thr Ile Asn Trp Tyr Ile Met Thr Ser Asp Ile  
 145 150 155 160  
 Asn His Lys Asp Thr Ile Glu Tyr Phe Lys Gln His Lys Tyr Phe Asn  
 165 170 175  
 Tyr Asp Ala Asn His Ile His Phe Phe Lys Gln Asp Asn Ile Val Ala  
 180 185 190



Leu Ser Glu Glu Gly Lys Leu Val Leu Asn Arg Asp Gly His Ile Met  
 195 200 205  
 Glu Thr Pro Asn Gly Asn Gly Gly Val Phe Lys Ser Leu Lys Lys Ala  
 210 215 220  
 Gly Tyr Leu Asp Lys Met Gln Gln Asp His Val Lys Tyr Ile Phe Leu  
 225 230 235 240  
 Asn Asn Ile Asp Asn Val Leu Val Lys Val Leu Asp Pro Leu Phe Ala  
 245 250 255  
 Gly Phe Thr Val Thr Gln Ser Lys Asp Ile Thr Ser Lys Thr Ile Gln  
 260 265 270  
 Pro Lys Asp Ser Glu Ser Val Gly Arg Leu Val Asn Val Asp Cys Lys  
 275 280 285  
 Asp Thr Val Leu Glu Tyr Ser Glu Leu Asp Thr Asp Ile Ala Asn Gln  
 290 295 300  
 Phe Asn Asn Ala Asn Ile Gly Ile His Ala Phe Lys Leu Gly Phe Ile  
 305 310 315 320  
 Thr Ser Ala Val Asp Arg Glu Leu Pro Tyr His Leu Ala Ile Lys Gln  
 325 330 335  
 Leu Lys Gln Leu Asp Glu Asn Phe Gly Val Val Glu Arg Pro Thr Leu  
 340 345 350  
 Lys Phe Glu Leu Phe Tyr Phe Asp Ile Phe Arg Tyr Gly Thr Ser Phe  
 355 360 365  
 Val Thr Leu Gln Val Pro Arg Glu Glu Glu Phe Ser Pro Leu Lys Asn  
 370 375 380  
 Lys Glu Gly Lys Asp Ser Val His Thr Ala Thr Glu Asp Leu Lys Arg  
 385 390 395 400  
 Met Gly Leu Ile

<210> 6376

<211> 49

<212> PRT

<213> S.epidermidis

<400> 6376

Asn Ser His Leu Asp Tyr Leu Cys Arg Tyr Ala Val Gln Ala Pro Val  
 1 5 10 15  
 Ile Tyr Leu Lys Ala Phe Leu Gly Ser Val Lys Ser Thr Thr Arg Gly  
 20 25 30  
 Tyr Asn Phe Leu Ser Pro Ser Gln Leu Ile Leu Met Ser Ala Gly Phe  
 35 40 45  
 Ala

<210> 6377

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6377

Asn Ser Ile His Ser Val Leu Leu Gly Lys Ile Leu Leu Thr Tyr Leu  
 1 5 10 15  
 Val Phe Asn Val Gln Ile Asn Gly Gly Pro Lys Trp Thr Arg Thr Thr  
 20 25 30  
 Asp Leu Thr Leu Ile Arg Arg Ala Leu  
 35 40

<210> 6378  
 <211> 192  
 <212> PRT  
 <213> S.epidermidis

<400> 6378

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Ala | Ser | Gln | Asn | Val | Val | Leu | Gln | Lys | Lys | Thr | Glu | Glu | Val | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Tyr | Asn | Ala | Ile | Gln | Val | Gly | Phe | Glu | Asp | Lys | Gln | Ala | Tyr | Lys |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Gly | Ser | Lys | Ser | Asn | Lys | Tyr | Ala | Asn | Lys | Pro | Ala | Glu | Gly | His |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     | 45  |     |     |
| Ala | Lys | Lys | Ala | Asp | Thr | Ala | Pro | Lys | Arg | Phe | Ile | Arg | Glu | Phe | Arg |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn | Val | Asn | Val | Asp | Glu | Tyr | Glu | Val | Gly | Gln | Glu | Val | Ser | Val | Asp |
| 65  |     |     |     | 70  |     |     |     |     |     | 75  |     |     |     |     | 80  |
| Thr | Phe | Glu | Thr | Gly | Asp | Ile | Ile | Asp | Val | Thr | Gly | Val | Ser | Lys | Gly |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Lys | Gly | Phe | Gln | Gly | Ala | Ile | Lys | Arg | His | Gly | Gln | Gly | Arg | Gly | Pro |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Met | Ala | His | Gly | Ser | His | Phe | His | Arg | Ala | Pro | Gly | Ser | Val | Gly | Met |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ala | Ser | Asp | Ala | Ser | Lys | Val | Phe | Lys | Gly | Gln | Lys | Met | Pro | Gly | Arg |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Met | Gly | Gly | Asn | Thr | Val | Thr | Val | Gln | Asn | Leu | Glu | Val | Val | Gln | Val |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Asp | Thr | Glu | Asn | Ser | Val | Ile | Leu | Val | Lys | Gly | Asn | Val | Pro | Gly | Pro |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Lys | Lys | Gly | Leu | Val | Glu | Ile | Thr | Thr | Ser | Ile | Lys | Lys | Gly | Asn | Lys |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     |     | 190 |     |

<210> 6379  
 <211> 123  
 <212> PRT  
 <213> S.epidermidis

<400> 6379

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Met | Ile | Gln | Gln | Glu | Thr | Arg | Leu | Lys | Val | Ala | Asp | Asn | Ser | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Arg | Glu | Val | Leu | Thr | Ile | Lys | Val | Leu | Gly | Gly | Ser | Gly | Arg | Lys |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Ala | Asn | Ile | Gly | Asp | Ile | Ile | Val | Cys | Thr | Val | Lys | Asn | Ala | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Gly | Gly | Val | Val | Lys | Lys | Gly | Asp | Val | Val | Lys | Ala | Val | Val | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Arg | Thr | Lys | Ser | Gly | Val | Arg | Arg | Glu | Asp | Gly | Ser | Tyr | Ile | Lys | Phe |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Asp | Glu | Asn | Ala | Cys | Val | Ile | Ile | Arg | Asp | Asp | Lys | Gly | Pro | Arg | Gly |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Thr | Arg | Ile | Phe | Gly | Pro | Val | Ala | Arg | Glu | Leu | Arg | Glu | Gly | Asn | Phe |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Met | Lys | Ile | Val | Ser | Leu | Ala | Pro | Glu | Val | Leu |     |     |     |     |     |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     |     |     |     |

<210> 6380

<211> 109  
 <212> PRT  
 <213> S.epidermidis

<400> 6380

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Gly | Ala | His | Met | His | Ile | Lys | Lys | Gly | Asp | Asn | Val | Lys | Val | Ile |
| 1   |     |     | 5   |     |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Gly | Lys | Asp | Lys | Gly | Lys | Glu | Gly | Lys | Val | Val | Ala | Thr | Glu | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Lys | Asp | Arg | Val | Val | Val | Glu | Gly | Val | Asn | Val | Val | Lys | Lys | His |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gln | Lys | Pro | Thr | Gln | Leu | Asn | Pro | Glu | Gly | Gly | Ile | Leu | Glu | Thr | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Ala | Ile | His | Val | Ser | Asn | Val | Gln | Leu | Leu | Asp | Pro | Lys | Thr | Asn |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Glu | Pro | Thr | Arg | Val | Gly | Tyr | Lys | Thr | Val | Asp | Gly | Lys | Lys | Val | Arg |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ile | Ala | Lys | Lys | Ser | Gly | Glu | Glu | Ile | Lys | Ala | Asn | Asn |     |     |     |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     |     |     |

<210> 6381  
 <211> 54  
 <212> PRT  
 <213> S.epidermidis

<400> 6381

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Ser | Lys | His | Asn | Asn | Ala | Val | Ile | Met | Asn | Asp | Glu | Val | Ile | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Arg | Asn | Arg | Ser | Pro | Leu | Ser | Tyr | Leu | Ser | Ala | Met | Asp | Pro | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gln | Thr | Leu | Asn | Ser | Lys | Ile | Gly | Ile | Arg | Arg | Gln | Lys | Leu | Thr | Lys |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Lys | Tyr | Thr | Ala | Leu |     |     |     |     |     |     |     |     |     |     |
|     |     | 50  |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6382  
 <211> 47  
 <212> PRT  
 <213> S.epidermidis

<400> 6382

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Thr | Met | His | Val | Leu | Thr | Val | Pro | Asn | Gln | Lys | Ala | Thr | Ala | Asn |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr | Val | Pro | Ala | Ala | Ala | Val | Ile | Arg | Arg | Trp | Gln | Ala | Leu | Ser | Gly |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Ile | Gly | Arg | Lys | Ala | Arg | Val | Gly | Gly | Phe | Leu | Ser | Leu | Met |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |

<210> 6383  
 <211> 43  
 <212> PRT  
 <213> S.epidermidis

<400> 6383

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Thr | Trp | Gln | Ile | Cys | Arg | Arg | Ile | Ile | Gln | Leu | Arg | Arg | Glu | Asn |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

Lys Leu Trp Leu Asn Tyr Lys Leu Pro Ser Leu Val Val Leu Leu Val  
                   20                  25                  30  
 Val Leu Lys His Asn Val Lys Leu Leu Lys Leu  
                   35                  40

<210> 6384  
 <211> 142  
 <212> PRT  
 <213> S.epidermidis

<400> 6384  
 Pro Lys Leu Lys Pro Ala Lys Thr Thr Ala Lys Ala Ile Ser Asn Gly  
 1                  5                  10                  15  
 Ser Phe Lys Pro Asn Ile Ile Ile Arg Leu Leu Thr Asn Lys Thr Lys  
                   20                  25                  30  
 Asn Glu Gln Ile Tyr Asn Val Phe Leu Val Lys Cys Ala Ser Ile Leu  
                   35                  40                  45  
 Pro Lys Leu Lys Leu Ser Val Ile Gln Ala Thr Asp Asn Gly Asn Ile  
                   50                  55                  60  
 Thr Asn Pro Leu Cys Lys Gly Asp Lys Leu Ser Phe Ser Cys Lys Tyr  
 65                  70                  75                  80  
 Thr Gly Ile Tyr Lys Leu Tyr Pro Ile Ser Val Ile Ala Ile Ser Lys  
                   85                  90                  95  
 Ser Val Ile Lys Thr Arg Thr Ile Asp Met Leu Asn Ser Phe Val Gly  
                   100                  105                  110  
 Arg Asn Gly Cys Ser Ile Leu Phe Ser Ile Leu Asn Ser Ser His Lys  
                   115                  120                  125  
 Thr Ala Lys Ala Lys Ile Ile Glu Asn Met Leu Lys Ile Ile  
                   130                  135                  140

<210> 6385  
 <211> 60  
 <212> PRT  
 <213> S.epidermidis

<400> 6385  
 Val Met Ala Lys Leu Gln Ile Thr Leu Thr Arg Ser Val Ile Gly Arg  
 1                  5                  10                  15  
 Pro Glu Thr Gln Arg Lys Thr Val Glu Ala Leu Gly Leu Lys Lys Thr  
                   20                  25                  30  
 Asn Ser Ser Val Val Val Glu Asp Asn Pro Ala Ile Arg Gly Gln Ile  
                   35                  40                  45  
 Asn Lys Val Lys His Leu Leu Thr Ile Glu Glu Lys  
                   50                  55                  60

<210> 6386  
 <211> 73  
 <212> PRT  
 <213> S.epidermidis

<400> 6386  
 Ser Met Ala Lys Gln Asp Val Ile Glu Leu Glu Gly Thr Val Leu Asp  
 1                  5                  10                  15  
 Thr Leu Pro Asn Ala Met Phe Lys Val Glu Leu Glu Asn Gly His Glu  
                   20                  25                  30  
 Ile Leu Ala His Val Ser Gly Lys Ile Arg Met Asn Tyr Ile Arg Ile

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<210> 6387
<211> 66
<212> PRT
<213> S.epidermidis
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<210> 6388
<211> 194
<212> PRT
<213> S.epidermidis
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[illegible]

<210> 6389  
 <211> 174  
 <212> PRT  
 <213> S.epidermidis

<400> 6389

```

Phe Lys Asn Lys Gly Glu Cys Ile Met Ala Val Asp Asn Asn Lys Ala
1      5      10      15
Lys Gln Ala Tyr Asp Asn Gln Thr Gly Val Asn Glu Gln Glu Arg Lys
20      25      30
Glu Gln Gln Gln Ala Gln Asn Asn Gln Pro Gln Phe Glu Asn Lys Leu
35      40      45
Thr Phe Ser Asp Glu Val Val Glu Lys Ile Ala Gly Ile Ala Ala Arg
50      55      60
Glu Val Lys Gly Ile Leu Asp Met Lys Gly Gly Phe Thr Asp Ser Phe
65      70      75      80
Thr Asn Ala Phe Ser Asn Gly Asn Asn Val Thr Thr Gly Val Ser Val
85      90      95
Glu Val Gly Glu Lys Gln Ala Ala Val Asp Leu Lys Val Ile Leu Glu
100     105     110
Tyr Gly Glu Ser Ala Pro Lys Ile Phe Arg Lys Val Thr Asp Leu Val
115     120     125
Lys Glu Gln Val Lys Tyr Ile Thr Gly Leu Glu Val Val Glu Val Asn
130     135     140
Met Gln Val Asp Asp Val Met Thr Lys Lys Glu Trp Gln Gln Lys Asn
145     150     155     160
Glu Lys Asp Asn Lys Glu Asn Asn Glu Arg Glu Gly Leu Lys
165     170

```

<210> 6390  
 <211> 256  
 <212> PRT  
 <213> S.epidermidis

<400> 6390

```

Glu Val Asn Lys Ser Met Asn Lys Tyr Asp Arg Leu Asp Glu Ile Thr
1      5      10      15
Lys Leu Val Asn Lys Arg Gly Ser Val Arg Thr Asn Glu Ile Val Glu
20      25      30
Asp Leu Asn Val Ser Asp Met Thr Val Arg Arg Asp Leu Ala Glu Leu
35      40      45
Glu Glu Lys Gly Val Leu Thr Lys Ile His Gly Gly Ala Arg Ser Asn
50      55      60
Ser Ala Phe Gln Tyr Lys Glu Met Ser His Gln Glu Lys His Thr Arg
65      70      75      80
Phe Ile Glu Glu Lys Arg Phe Ile Ala Lys Asn Ala Val Asp Leu Ile
85      90      95
Glu Asp Gly Asp Thr Ile Phe Leu Gly Pro Gly Thr Thr Val Gln Lys
100     105     110
Leu Ala Glu Glu Ile Asn His Tyr Ser Leu Thr Ile Ile Thr Asn Cys
115     120     125
Leu Pro Val Phe Asn Ile Leu Ile Lys Lys Gln Thr Leu His Phe Arg
130     135     140
Val Tyr Leu Leu Gly Gly Glu Met Arg Asp Leu Thr Glu Ala Phe Val
145     150     155     160
Gly Glu Met Thr Asn Gln Leu Leu Ser Gln Leu Arg Phe Ser Lys Met

```

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |  |  |
| Phe | Phe | Ser | Ser | Asn | Gly | Val | Lys | Asp | Gly | Leu | Ala | Met | Thr | Ser | Ser |  |  |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |  |  |
| Ile | Glu | Glu | Ala | Tyr | Thr | Gln | Gln | Ile | Ala | Leu | Ser | His | Ser | Leu | Glu |  |  |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |
| Lys | Tyr | Leu | Leu | Ile | Asp | Ser | Ser | Lys | Ile | Gly | Lys | Asp | Asp | Phe | Ser |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |  |  |
| Ser | Phe | Cys | Glu | Leu | Arg | Glu | Leu | Asn | Ala | Val | Leu | Thr | Asp | Asn | Asn |  |  |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |  |  |
| Asp | Leu | Glu | Lys | Lys | Glu | Lys | Ile | Glu | Ser | Tyr | Val | Glu | Val | Ile | Ser |  |  |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |  |  |

&lt;210&gt; 6391

&lt;211&gt; 75

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6391

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| His | Ser | Asp | Lys | Phe | Asn | Ser | Thr | Ser | Tyr | Tyr | Val | Asn | Phe | Phe | Lys |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Ser | Ile | His | Ile | Tyr | Ser | Ile | His | Phe | Tyr | Leu | Phe | Ile | Ser | Ile | Cys |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Asn | Leu | Lys | Tyr | Ile | Thr | Leu | Tyr | Ile | Cys | Ile | Ile | Leu | Asn | Asn | Tyr |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Val | Lys | Asn | Thr | Ile | Arg | Tyr | Leu | Leu | Thr | Phe | Ser | Lys | Ser | Ile | Leu |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |
| Thr | Leu | Phe | His | Leu | Ser | Ser | Ser | Ile | Arg | Ile |     |     |     |     |     |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     |     |  |  |

&lt;210&gt; 6392

&lt;211&gt; 168

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6392

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| Phe | Arg | Cys | Lys | Asp | Leu | Lys | Ala | Leu | Phe | Gln | Lys | His | Met | Cys | Leu |  |  |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |  |  |
| Ile | Thr | Leu | Ile | Gln | Lys | Arg | Arg | Leu | Ile | Met | Thr | Ile | Ile | Ile | Gly |  |  |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |  |  |
| Ser | Asp | Val | Asp | Gly | Lys | Arg | Leu | Lys | Glu | Leu | Ile | Lys | Asp | Tyr | Leu |  |  |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |  |  |
| Glu | Asp | Asn | Asp | Tyr | Asp | Val | Leu | Asp | Val | Thr | Glu | Gly | Lys | Asp | Leu |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |  |  |
| Asp | Phe | Val | Asp | Ser | Thr | Val | Ser | Val | Ala | Lys | Glu | Val | Gln | Lys | Ser |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |  |
| Asp | Asp | Asn | Leu | Gly | Ile | Ala | Ile | Asp | Ala | Tyr | Gly | Ala | Gly | Ser | Phe |  |  |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |
| Ile | Val | Ala | Thr | Lys | Ile | Lys | Gly | Met | Ile | Ala | Ala | Glu | Val | Ser | Asp |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Glu | Arg | Ser | Ala | Tyr | Met | Thr | Arg | Ser | His | Asn | Asn | Ala | Arg | Met | Ile |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |
| Thr | Met | Gly | Ala | Glu | Ile | Val | Gly | Asp | Thr | Leu | Ala | Lys | Asn | Val | Ala |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |
| Lys | Glu | Phe | Val | Asn | Gly | His | Tyr | Asp | Gly | Gly | Arg | His | Gln | Ile | Arg |  |  |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |  |  |
| Val | Asp | Met | Leu | Asn | Lys | Met | Cys |     |     |     |     |     |     |     |     |  |  |

165

<210> 6393  
 <211> 74  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6393

Ala Asn Ile Leu Val Val Trp Ala Thr Pro His Pro Phe Pro Leu Asn  
 1 5 10 15  
 Ile Tyr Phe Gly Thr Leu Ala Gly Gly Leu Gly Cys Phe Pro Phe Glu  
 20 25 30  
 His Gly Pro Tyr His Pro Cys Ser Asp Ser Gln Val Lys Leu Ile Gly  
 35 40 45  
 Ile Arg Ser Leu Ser Glu Phe Gly Asn Pro Arg Gly Ala Pro Arg Pro  
 50 55 60  
 Asn Ser Ala Leu Pro Pro Ile Ile Ile Thr  
 65 70

<210> 6394  
 <211> 290  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6394

Tyr Thr Val Asn Leu Asn Tyr Cys Arg Met Phe Ser Asp Ile Lys Ile  
 1 5 10 15  
 Leu Gly Val Val Asp Val Asn Gly Ser Asn Pro Ile Ile Glu Phe Lys  
 20 25 30  
 Asp Val Ser Phe Gln Tyr Gln Ser Asp Ala Ala Phe Thr Leu Asn Arg  
 35 40 45  
 Val Ser Phe Ser Ile Pro Ala Gly Gln Trp Thr Ser Ile Val Gly His  
 50 55 60  
 Asn Gly Ser Gly Lys Ser Thr Ile Ala Lys Leu Met Val Gly Ile Glu  
 65 70 75 80  
 Glu Pro Ser Glu Gly Gln Ile Leu Phe Gln Asn Leu Pro Val Asp Ser  
 85 90 95  
 Gln Asn Lys Arg Glu Val Arg Lys His Ile Gly Ile Val Phe Gln Asn  
 100 105 110  
 Pro Asp Asn Gln Phe Val Gly Ser Ile Val Lys Phe Asp Val Ala Phe  
 115 120 125  
 Gly Leu Glu Asn Gln Leu Val Pro Tyr Lys Glu Met Val Ser Lys Val  
 130 135 140  
 Asn Gln Val Leu Thr Glu Val Asp Met Ile Asn Lys Ala Asp Asp Glu  
 145 150 155 160  
 Pro His Ser Leu Ser Gly Gly Gln Lys Gln Arg Val Ala Ile Ala Gly  
 165 170 175  
 Val Leu Ala Leu Asn Pro Asp Val Leu Ile Leu Asp Glu Ala Thr Thr  
 180 185 190  
 Met Leu Asp Pro His Gly Lys Ser Ser Leu Leu Asn Leu Val Asn Glu  
 195 200 205  
 Val Lys Val Asn Asn His Val Thr Ile Ile Ser Ile Thr His Asp Leu  
 210 215 220  
 Asp Glu Ala Met His Ala Asp Gln Ile Ile Val Leu Asn Lys Gly Thr  
 225 230 235 240  
 Val Phe Lys Gln Gly Thr Pro Gln Asp Ile Phe Lys Cys Glu Asp Ala

6393  
 6394  
 6395  
 6396  
 6397  
 6398  
 6399  
 6400  
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 6500



2831

245                      250                      255  
 Leu Ile Ser Val Gly Leu Asp Leu Pro Phe Pro Leu Lys Met Asn Arg  
                     260                      265                      270  
 Leu Leu Gly Phe Asp Ser Thr Tyr Val Thr Tyr Glu Gly Leu Ile Lys  
                     275                      280                      285  
 Lys Leu  
                     290

<210> 6395  
 <211> 49  
 <212> PRT  
 <213> S.epidermidis

<400> 6395  
 Ile Ile Thr Lys Thr Asn Thr Val Val Glu Lys Ile Val Asn Asn Arg  
 1                      5                      10                      15  
 Ile Val Asn Phe Asp Phe Ile Ile Ser Pro Leu His Val Tyr Leu Leu  
                     20                      25                      30  
 Ile Ile Leu Leu Leu Val Ile Asn Tyr Leu Ile Tyr Gly Ile Thr Leu  
                     35                      40                      45  
 Lys

<210> 6396  
 <211> 51  
 <212> PRT  
 <213> S.epidermidis

<400> 6396  
 Asn Cys Leu Lys Arg Ala Gly Ile Asn Ser Ile Gln Glu Leu Ala Asp  
 1                      5                      10                      15  
 Lys Ser Glu Ala Asp Met Met Lys Val Arg Asn Leu Gly Arg Lys Ser  
                     20                      25                      30  
 Leu Glu Glu Val Lys Tyr Lys Leu Glu Asp Leu Gly Leu Gly Leu Arg  
                     35                      40                      45  
 Lys Glu Asp  
                     50

<210> 6397  
 <211> 181  
 <212> PRT  
 <213> S.epidermidis

<400> 6397  
 Asn Met Leu Lys Tyr Phe Tyr Lys Gly Glu Gln Asn Met Thr Gly Lys  
 1                      5                      10                      15  
 Thr His Ala Ser Cys Gly Phe Leu Val Gly Ala Ile Thr Thr Gln Tyr  
                     20                      25                      30  
 Phe His Thr Asp Ile Phe Thr Ser Ile Ser Val Ile Val Leu Ser Val  
                     35                      40                      45  
 Ile Ser Ser Ile Leu Pro Asp Ile Cys His Thr Gln Ser Lys Ile Gly  
                     50                      55                      60  
 Arg Arg Phe Arg Leu Thr Ser Phe Phe Val Arg Ile Leu Phe Gly His  
 65                      70                      75                      80  
 Arg Thr Phe Thr His Ser Leu Leu Phe Ile Ile Gly Ile Ser Phe Leu  
                     85                      90                      95

6395-6397: S.epidermidis



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<210> 6401
<211> 160
<212> PRT
<213> S.epidermidis
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|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <400> 6401 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Gly        | Arg | Thr | Lys | Val | Met | Lys | Phe | Leu | Lys | Asn | Lys | Ser | Tyr | His | Leu |
| 1          |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu        | Val | Thr | Leu | Ile | Val | Leu | Thr | Ile | Phe | Val | Ile | Ser | Gly | Ala | Ile |
|            |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Phe        | Leu | Thr | Phe | Leu | Gly | Phe | Gly | Leu | Tyr | Gly | Leu | Ser | Arg | Ile | Leu |
|            |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile        | Tyr | Leu | His | Leu | Gly | Asp | Phe | Ser | Tyr | Asn | Lys | Gly | Phe | Tyr | Asp |
|            | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn        | Leu | Ile | Tyr | Tyr | Gly | Ser | Tyr | Ile | Val | Leu | Gly | Tyr | Phe | Thr | Leu |
| 65         |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Phe        | Ser | Ile | Glu | His | Leu | Met | Asp | Tyr | Phe | Lys | Lys | Asn | Leu | Pro | Lys |
|            |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asn        | Pro | Tyr | Phe | Gln | Gly | Ile | Asn | Phe | His | Leu | Ile | Ser | Tyr | Ile | Val |
|            |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |

Thr Thr Ile Met Phe Tyr Phe Ile Val His Ile His Tyr Val His Val  
 115 120 125  
 Asn Ile His Phe Trp Val Ile Met Ile Ile Ile Gly Phe Leu Phe Val  
 130 135 140  
 Cys Lys Glu Val Phe Tyr Pro Glu Ser Lys Asn Leu Asn Asn Lys Lys  
 145 150 155 160

<210> 6402

<211> 43

<212> PRT

<213> S.epidermidis

<400> 6402

Val Thr Ala Lys Pro Ser Phe Thr Ile Glu Pro Cys Gly Ser Ile Tyr  
 1 5 10 15  
 Tyr Pro Val Leu Ala Pro Val Ser Arg Ser Tyr Pro Ser Leu Ile Gly  
 20 25 30  
 Arg Leu Ser Thr Cys Tyr Ser Pro Val Arg Arg  
 35 40

<210> 6403

<211> 591

<212> PRT

<213> S.epidermidis

<400> 6403

Ile Ile Gln Lys Arg Glu Leu Thr Pro Met Asn Lys Leu Ile Ala Trp  
 1 5 10 15  
 Ile Glu Lys Gly Lys Pro Phe Phe Glu Lys Ile Ser Arg Asn Ile Tyr  
 20 25 30  
 Leu Arg Ala Ile Arg Asp Gly Phe Ile Ala Ala Ile Pro Ile Ile Leu  
 35 40 45  
 Phe Ser Ser Ile Phe Ile Leu Ile Thr Tyr Val Pro Asn Val Phe Gly  
 50 55 60  
 Phe Thr Trp Ser Lys Thr Met Glu Gly Ile Leu Met Lys Pro Tyr Asn  
 65 70 75 80  
 Tyr Thr Met Gly Ile Val Gly Leu Leu Val Ala Gly Thr Thr Ala Lys  
 85 90 95  
 Ser Leu Thr Asp Ser Tyr Asn Arg Lys Leu Asp Lys Ala Asn Gln Ile  
 100 105 110  
 Asn Phe Ile Ser Thr Met Met Ala Ala Ile Cys Gly Phe Leu Phe Leu  
 115 120 125  
 Ala Ala Asp Pro Val Lys Asp Gly Gly Phe Ser Ser Ala Phe Met Gly  
 130 135 140  
 Thr Lys Gly Leu Leu Thr Ala Phe Ile Ser Ala Phe Ile Thr Val Ile  
 145 150 155 160  
 Val Tyr Asn Phe Phe Val Lys Arg Asn Ile Thr Ile Lys Met Pro Lys  
 165 170 175  
 Glu Val Pro Pro Asn Ile Ser Gln Val Phe Lys Asp Ile Phe Pro Leu  
 180 185 190  
 Ser Ala Val Ile Leu Ile Leu Tyr Ala Leu Asp Leu Leu Ser Arg Ala  
 195 200 205  
 Ile Val His Thr Asn Val Ala Asn Ala Val Leu Lys Val Phe Glu Pro  
 210 215 220  
 Leu Phe Thr Ala Ala Asp Gly Trp Ile Gly Val Thr Leu Ile Phe Gly  
 225 230 235 240





Gln Leu Pro Glu Gly Lys Thr Ala Leu Lys Tyr Gly Phe Asp Leu Ala  
 290 295 300  
 Thr Glu Val Gly Ile Lys Ser Pro Gly Phe Lys Glu Phe Leu Ile Ser  
 305 310 315 320  
 Gly Phe Lys Thr Val Val Asp Met Trp Phe Val Ile Leu Pro Val Val  
 325 330 335  
 Met Ser Ile Gly Thr Ile Ala Thr Ile Ile Ala Asn Tyr Thr Pro Val  
 340 345 350  
 Phe Glu Ile Ile Gly Lys Pro Phe Val Pro Val Leu Glu Leu Leu Gln  
 355 360 365  
 Ile Pro Glu Ala His Glu Ala Ser Gln Thr Ile Leu Ile Gly Phe Ala  
 370 375 380  
 Asp Met Phe Leu Pro Ser Ile Leu Ile Glu Gly Val Gln Asn Asp Val  
 385 390 395 400  
 Thr Arg Phe Val Ile Gly Ala Leu Ser Ile Ser Gln Leu Val Tyr Leu  
 405 410 415  
 Ser Glu Val Gly Gly Val Ile Leu Gly Ser Lys Ile Pro Val Ser Ile  
 420 425 430  
 Ser Lys Leu Phe Met Ile Phe Leu Ile Arg Thr Ile Ile Thr Leu Pro  
 435 440 445  
 Ile Ile Ala Leu Leu Ala His Leu Phe Ile Gly  
 450 455

<210> 6406

<211> 248

<212> PRT

<213> S.epidermidis

<400> 6406

Lys Gln Met Lys Lys Pro Asp Ile Gln Gln Leu Lys Asp Ile Val Asn  
 1 5 10 15  
 Asn Ser Asn Gln Ile Val Phe Phe Thr Gly Ala Gly Val Ser Val Ala  
 20 25 30  
 Ser Gly Ile Pro Asp Phe Arg Ser Met Gly Gly Leu Tyr Asp Glu Ile  
 35 40 45  
 Ser Lys Asp Gly Gln Ser Pro Glu Tyr Leu Leu Ser Ile Asp His Leu  
 50 55 60  
 His Asp Asn Lys Glu Ser Phe Ile Asn Phe Tyr His Glu Arg Leu Leu  
 65 70 75 80  
 Ile Ala Asp Lys Lys Pro Asn Ile Val His Gln Trp Ile Ala Gln Leu  
 85 90 95  
 Glu Asn Gln Gln Lys Ser Leu Gly Val Ile Thr Gln Asn Ile Asp Gly  
 100 105 110  
 Leu His Glu Asp Ala Gly Ser His Asn Ile Asp Glu Leu His Gly Thr  
 115 120 125  
 Leu Asn Arg Phe Tyr Cys Ile Asn Cys Tyr Glu Glu Tyr Ser Lys Ser  
 130 135 140  
 Tyr Val Met Thr His His Leu Lys Tyr Cys Glu Lys Cys Gly Asn Val  
 145 150 155 160  
 Ile Arg Pro Asp Ile Val Leu Tyr Gly Glu Met Leu Asn Gln Lys Thr  
 165 170 175  
 Val Phe Lys Ala Leu Asp Lys Ile Gln His Ala Asp Thr Leu Ile Val  
 180 185 190  
 Leu Gly Ser Ser Leu Val Val Gln Pro Ala Ala Gly Phe Val Ser Glu  
 195 200 205  
 Phe Lys Gly Asp Asn Leu Val Ile Ile Asn Arg Asp Ala Thr Pro Tyr

|                     |                     |                         |
|---------------------|---------------------|-------------------------|
| 210                 | 215                 | 220                     |
| Asp His Thr Ala Ser | Leu Val Ile His Asp | Asp Met Thr Asn Val Ile |
| 225                 | 230                 | 235                     |
| Glu Glu Ile Leu Asn | Ser Asn Ser         |                         |
|                     | 245                 |                         |

&lt;210&gt; 6407

&lt;211&gt; 354

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6407

|   |     |     |     |     |
|---|-----|-----|-----|-----|
| Cys Met Ala Asn Val Arg Val Asn Leu Ser Lys Ile Lys Tyr Asn Ala | 1   | 5   | 10  | 15  |
| Lys Val Leu Gln Ser Leu Leu Glu Arg Arg His Ile His Phe Thr Pro | 20  | 25  | 30  |     |
| Val Ile Lys Cys Val Ala Gly Asp Lys Arg Ile Val Ser Ser Ile Lys | 35  | 40  | 45  |     |
| Ser Leu Gly Ile Thr His Phe Ala Glu Ser Arg Leu Asp Asn Ile Glu | 50  | 55  | 60  |     |
| Gln Leu Lys Asp Leu Asp Ile Thr Phe Thr Leu Leu Arg Pro Thr Val | 65  | 70  | 75  | 80  |
| Glu Ala Asp Leu Glu Lys Met Ile Ser Arg Val Glu Met Ser Ile Gln | 85  | 90  | 95  |     |
| Thr Glu Leu Thr Thr Ile Lys Lys Leu Asn Thr Leu Ala Lys Ser Leu | 100 | 105 | 110 |     |
| Asp Ile Lys His Gln Ile Met Leu Met Val Asp Trp Lys Asp Gly Arg | 115 | 120 | 125 |     |
| Glu Gly Val Leu Thr Tyr Asp Val Val Arg Tyr Val Gln Glu Val Leu | 130 | 135 | 140 |     |
| Arg Leu Ser His Ile Gln Leu Val Gly Leu Ala Phe Asn Phe Met Cys | 145 | 150 | 155 | 160 |
| Phe Lys Ser Glu Ala Pro Asn Glu Lys Asp Val Arg Met Ile Asn Lys | 165 | 170 | 175 |     |
| Phe Ile His Asn Val Glu Asn Glu Thr His Phe Lys Phe Arg Ile Ile | 180 | 185 | 190 |     |
| Ser Gly Gly Asn Ser Ser Met Leu Pro Gln Thr Leu Tyr Asn His Leu | 195 | 200 | 205 |     |
| Asp Lys Ile Asn Asp Leu Arg Ile Gly Glu Ala Leu Leu Arg Gly Ile | 210 | 215 | 220 |     |
| Asp Thr Thr Thr Asn His Ser Ile Asn Ser Leu Tyr Gln Asn Ala Ile | 225 | 230 | 235 | 240 |
| Val Leu Glu Ala Glu Ile Ile Glu Ile Lys Pro Arg Leu Tyr Gln Lys | 245 | 250 | 255 |     |
| Asn Asn Gln Ser Tyr Leu Gln Ala Ile Val Asp Ile Gly Tyr Leu Asp | 260 | 265 | 270 |     |
| Thr Phe Ile Glu Gly Ile Lys Pro Leu Gly Asn Asp Ile Arg Ile Leu | 275 | 280 | 285 |     |
| Gly Ala Ser Ser Asp His Leu Met Ile Asp Leu Asn Asn Gln Asp His | 290 | 295 | 300 |     |
| Tyr Gln Ile Gly Asp Lys Leu Gln Phe Ser Leu Asn Tyr Glu Ala Leu | 305 | 310 | 315 | 320 |
| Ser Gln Ser Met Tyr Met Lys Asn Leu Thr Lys Leu Tyr Ser Ser Asp | 325 | 330 | 335 |     |
| Ser Lys Ile Glu Ser Leu Val Gln Asn Phe Asp Met Pro Ile Tyr Ser | 340 | 345 | 350 |     |



Gln Cys

<210> 6408  
 <211> 78  
 <212> PRT  
 <213> S.epidermidis

<400> 6408  
 Asn Val Lys Asn Trp Val Val Lys Gln Met Lys Ala Lys Glu Ile Arg  
 1 5 10 15  
 Asp Leu Thr Thr Ser Glu Ile Glu Glu Ile Lys Ser Ser Lys Glu  
 20 25 30  
 Glu Leu Phe Asn Leu Arg Phe Gln Leu Ala Thr Gly Gln Leu Glu Glu  
 35 40 45  
 Thr Ala Arg Ile Arg Thr Val Arg Lys Thr Ile Ala Arg Leu Lys Thr  
 50 55 60  
 Val Ala Arg Glu Arg Glu Ile Glu Gln Ser Lys Ala Asn Gln  
 65 70 75

<210> 6409  
 <211> 348  
 <212> PRT  
 <213> S.epidermidis

<400> 6409  
 Val Arg Trp Lys Thr Met Thr Met Val Asn Lys Asp Ser Gln Ser Ala  
 1 5 10 15  
 Ile Glu Gln Lys Lys Lys Arg Thr Thr Leu Thr Phe Ile Val Gly  
 20 25 30  
 Val Cys Leu Leu Phe Ile Ser Val Tyr Leu Asn Leu Ala Ile Gly Ser  
 35 40 45  
 Ser Lys Ile Gln Phe Asn Asp Ile Leu Ser Tyr Val Thr Gly His Thr  
 50 55 60  
 Asn Thr Lys Ala Thr Phe Leu Ile His Asn Val Arg Met Pro Arg Met  
 65 70 75 80  
 Leu Ala Gly Leu Ile Ile Gly Gly Ala Leu Ala Ile Ala Gly Leu Leu  
 85 90 95  
 Met Gln Ala Ile Thr Lys Asn Pro Leu Ala Ser Pro Gln Ile Phe Gly  
 100 105 110  
 Val Asn Ala Gly Ala Ser Phe Val Ile Val Leu Ile Thr Val Leu Ile  
 115 120 125  
 Pro Ser Leu Gly Ser Tyr Ser Thr Ile Leu Ala Ile Ile Gly Ala Phe  
 130 135 140  
 Leu Gly Gly Phe Thr Val Tyr Thr Leu Ser Gly Ser Thr Lys Ser Ile  
 145 150 155 160  
 Thr Pro Ile Lys Leu Ala Leu Ala Gly Met Ala Ile His Leu Phe Phe  
 165 170 175  
 Ser Ser Met Thr Gln Gly Ile Ile Ile Leu Asn Glu Asp Ser Asn Asp  
 180 185 190  
 Thr Val Met Phe Trp Leu Val Gly Ser Leu Ala Gly Ile Lys Trp Gln  
 195 200 205  
 Gln Ile Ile Phe Ile Leu Pro Phe Leu Leu Leu Ala Ile Phe Val Thr  
 210 215 220  
 Ile Phe Met Gly Arg Gln Leu Thr Ile Leu Glu Leu Gly Asp Asp Ile  
 225 230 235 240

Downloaded from www.jstor.org

Ala Arg Gly Leu Gly Gln Arg Thr Glu Ile Val Arg Met Ile Val Gly  
                           245                          250                          255  
 Ile Leu Val Val Val Leu Ala Gly Val Ser Val Ser Ile Ala Gly Pro  
                           260                          265                          270  
 Ile Gly Phe Val Gly Leu Ile Val Pro His Ile Val Lys Arg Tyr Ile  
                           275                          280                          285  
 Asn Lys Asn Tyr Val Leu Met Ile Pro Leu Thr Phe Ile Phe Gly Ala  
                           290                          295                          300  
 Thr Leu Leu Leu Ile Ser Asp Val Leu Cys Arg Leu Ile Thr Tyr Pro  
 305                          310                          315                          320  
 Phe Glu Ser Pro Val Gly Ile Val Thr Ser Phe Val Gly Ala Phe Tyr  
                           325                          330                          335  
 Phe Leu Phe Ile Thr Val Arg Gly Val Asn Arg Ile  
                           340                          345

&lt;210&gt; 6410

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6410

Gly Gly Ala Glu Met Lys Leu His Glu Leu Lys Ala Ala Glu Gly Ser  
 1                          5                          10                          15  
 Arg Arg Val Arg Asn Arg Val Gly Arg Gly Ala Ala Thr Gly Asn Gly  
                           20                          25                          30  
 Lys Thr Ser Gly Arg Gly Gln Lys Gly Gln Lys Ala Arg Ser Gly Gly  
                           35                          40                          45  
 Lys Val Arg Pro Gly Phe Glu Gly Gly Gln Leu Pro Leu Phe Arg Arg  
                           50                          55                          60  
 Leu Pro Lys Arg Gly Phe Thr Asn Ile Asn Arg Lys Glu Tyr Ala Ile  
 65                          70                          75                          80  
 Val Asn Leu Asp Gln Leu Asn Lys Phe Glu Asp Gly Thr Glu Val Thr  
                           85                          90                          95  
 Pro Ala Leu Leu Val Glu Ser Gly Val Val Lys Asn Glu Lys Ser Gly  
                           100                          105                          110  
 Ile Lys Val Leu Gly Asn Gly Ser Leu Asp Lys Lys Leu Thr Val Lys  
                           115                          120                          125  
 Ala His Lys Phe Ser Ala Ser Ala Ala Glu Ala Ile Asp Ala Lys Gly  
                           130                          135                          140  
 Gly Ala His Glu Val Ile  
 145                          150

&lt;210&gt; 6411

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6411

Leu Arg Ile Glu Cys Pro Thr Thr Pro Thr Ser Lys Leu Val Gly Leu  
 1                          5                          10                          15  
 Gly Phe Ser Arg Phe Ala Arg Arg Tyr Ser Gly Asn Arg Phe Phe Phe  
                           20                          25                          30  
 Leu Phe Leu Arg Val Leu Arg Cys Phe Ser Ser Pro Gly Leu Pro Ser  
                           35                          40                          45  
 Asp Met Leu  
 50

<210> 6412  
 <211> 128  
 <212> PRT  
 <213> S.epidermidis

<400> 6412  
 His Ser Lys Glu Arg Ser Ile Glu Met Ile Ser Lys Ile Asp Lys Asn  
 1 5 10 15  
 Lys Val Arg Leu Lys Arg Arg Ala Arg Val Arg Thr Lys Leu Ser Gly  
 20 25 30  
 Thr Ala Glu Lys Pro Arg Leu Asn Val Tyr Arg Ser Asn Lys His Ile  
 35 40 45  
 Tyr Ala Gln Ile Ile Asp Asp Val Lys Gly Val Thr Leu Ala Gln Ala  
 50 55 60  
 Ser Ser Gln Asp Lys Asp Ile Ala Asn Thr Ser Ala Ser Lys Val Asp  
 65 70 75 80  
 Leu Ala Thr Thr Val Gly Gln Ala Ile Ala Lys Lys Ala Asn Asp Lys  
 85 90 95  
 Gly Ile Lys Glu Ile Val Phe Asp Arg Gly Gly Tyr Leu Tyr His Gly  
 100 105 110  
 Arg Val Lys Ala Leu Ala Asp Ala Ala Arg Glu Asn Gly Leu Glu Phe  
 115 120 125

<210> 6413  
 <211> 94  
 <212> PRT  
 <213> S.epidermidis

<400> 6413  
 Leu Lys Glu Glu Val Thr Lys Val Ser Glu Arg Asn Asp Arg Lys Val  
 1 5 10 15  
 Tyr Val Gly Arg Val Val Ser Asp Lys Met Asp Lys Thr Ile Thr Val  
 20 25 30  
 Leu Val Glu Thr Tyr Lys Thr His Lys Leu Tyr Gly Lys Arg Val Lys  
 35 40 45  
 Tyr Ser Lys Lys Tyr Lys Thr His Asp Glu Asn Asn Ser Ala Lys Leu  
 50 55 60  
 Gly Asp Ile Val Lys Ile Gln Glu Thr Arg Pro Leu Ser Ala Thr Lys  
 65 70 75 80  
 Arg Phe Arg Leu Val Glu Ile Val Glu Glu Ser Val Ile Ile  
 85 90

<210> 6414  
 <211> 123  
 <212> PRT  
 <213> S.epidermidis

<400> 6414  
 Val Glu Glu Glu Ile Leu Met Glu Ala Lys Ala Val Ala Arg Thr Ile  
 1 5 10 15  
 Arg Ile Ala Pro Arg Lys Val Arg Leu Val Leu Asp Leu Ile Arg Gly  
 20 25 30  
 Lys Asn Ala Gly Glu Ala Ile Ala Ile Leu Lys Leu Thr Asn Lys Ala  
 35 40 45  
 Ser Ser Pro Val Ile Glu Lys Val Leu Met Ser Ala Leu Ala Asn Ala

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |  |  |
| Glu | His | Asn | Tyr | Asp | Met | Asn | Thr | Asp | Glu | Leu | Val | Val | Lys | Glu | Ala |  |  |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |  |  |
| Tyr | Ala | Asn | Glu | Gly | Pro | Thr | Leu | Lys | Arg | Phe | Arg | Pro | Arg | Ala | Gln |  |  |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |  |  |
| Gly | Arg | Ala | Ser | Ala | Ile | Asn | Lys | Arg | Thr | Ser | His | Ile | Thr | Ile | Val |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |  |  |
| Val | Ser | Asp | Gly | Lys | Glu | Glu | Ala | Lys | Glu | Ala |     |     |     |     |     |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     |     |     |     |  |  |

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<210> 6415
<211> 615
<212> PRT
<213> S.epidermidis
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|------------|--------|---------|---------|---------|---------|--------|---------|---------|---------|--------|--------|--------|--------|--------|--------|
| <400> 6415 |        |         |         |         |         |        |         |         |         |        |        |        |        |        |        |
| Leu 1      | His    | Leu     | Leu     | Leu 5   | Trp     | Glu    | Leu     | Ala     | Leu 10  | Ser    | Val    | Phe    | His    | Ser 15 | Phe    |
| Phe        | Ile    | Ser     | Tyr 20  | Asn     | Val     | Phe    | Arg     | Ile 25  | Trp     | Arg    | Arg    | Ala    | Ile 30 | Met    | Asn    |
| His        | Lys    | Glu 35  | Trp     | Leu     | Leu     | Ala    | Asp 40  | Lys     | Asn     | Ile    | Gln    | Tyr 45 | Arg    | Thr    | Ile    |
| Asn        | Ala 50 | Met     | Ile     | Lys     | Glu     | His 55 | Ile     | Val     | Ser     | Glu    | Gly 60 | Met    | Arg    | Ile    | Lys    |
| Glu 65     | Gly    | Thr     | Cys     | Lys     | Val 70  | Glu    | Ile     | Phe     | Leu     | Asn 75 | Asn    | His    | Leu    | Leu    | Ser 80 |
| Leu        | Lys    | Val     | Ala     | Arg 85  | Lys     | Ser    | Ala     | Leu     | Lys 90  | Arg    | Tyr    | Val    | Phe    | Thr 95 | Gly    |
| Asp        | Ile    | Val     | Leu 100 | Lys     | Asn     | Lys    | Lys     | Leu 105 | Ser     | Gln    | Ser    | Ile    | Glu    | Ser    | Leu    |
| Glu        | Glu    | Leu     | Leu 115 | Gln     | Ile     | Leu    | Thr 120 | Glu     | Ile     | Phe    | His    | Ile    | Asn    | Ile    | Ser    |
| Lys        | Arg    | Leu     | Tyr 130 | Asp     | Glu     | Leu    | Ile 135 | His     | Ser     | Arg    | Asp    | Ser    | Leu    | Tyr    | Glu    |
| Thr 145    | Tyr    | Lys     | His     | Phe     | Tyr 150 | Asn    | Arg     | Gln     | Thr     | Leu    | Ile    | His    | Gln    | Ser    | Met    |
| Lys        | Phe    | Ser     | Lys     | Leu 165 | Pro     | Asp    | Ser     | Ile     | Asn 170 | Phe    | Ile    | Ala    | Trp    | Leu    | Gln    |
| His        | Leu    | Gln     | Asp 180 | Ser     | Gly     | Ile    | Thr     | Asp 185 | Asp     | Leu    | Ser    | Tyr    | Ser    | Glu    | Ser    |
| Leu        | Val    | Ile     | Glu 195 | Gly     | His     | Pro    | Thr 200 | His     | Pro     | Leu    | Thr    | Lys    | Thr    | Lys    | Leu    |
| Pro        | Leu    | Ser     | Thr 210 | Asn     | Glu     | Leu    | Lys 215 | Leu     | Tyr     | Ala    | Pro    | Glu    | Phe    | Glu    | Lys    |
| Val 225    | Ile    | Pro     | Leu     | Asn     | Ile 230 | Met    | Leu     | Ile     | Glu     | Lys    | Asn    | His    | Val    | Val    | Thr    |
| Thr        | Ala    | Ile     | Asn 245 | Asp     | Asp     | Gln    | Asn     | Phe     | Ile     | Leu    | Asn    | Gln    | Val    | Ile    | Pro    |
| Glu        | Tyr    | Arg     | Asp 260 | Arg     | Leu     | Lys    | Cys     | Tyr 265 | Leu     | Glu    | Pro    | Leu    | Arg    | Leu    | Asn    |
| Leu        | Asn    | Asp 275 | Tyr     | Arg     | Val     | Met    | Leu     | Ile 280 | His     | Pro    | Trp    | Gln    | Tyr    | Asp    | His    |
| Thr        | Ile    | Gly     | Glu 290 | Gln     | Phe     | Glu    | Glu 295 | Trp     | Ile     | Ala    | Lys    | Lys    | Ile    | Leu    | Leu    |
| Pro 305    | Thr    | Pro     | Phe     | Thr     | Val 310 | Glu    | Ser     | Lys     | Ala     | Thr    | Leu    | Ser    | Phe    | Arg    | Thr    |
| >320       |        |         |         |         |         |        |         |         |         |        |        |        |        |        |        |

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Met Asp Leu Ile His Thr Pro Tyr His Val Lys Leu Pro Val Asn Val
      325      330      335
Gln Ala Thr Ser Ala Val Arg Thr Val Ser Ser Val Thr Thr Val Asp
      340      345      350
Gly Pro Lys Leu Ser His Ala Leu Gln Gly Leu Leu Gln Glu Phe Pro
      355      360      365
Glu Leu Gln Val Ala Met Glu Pro Tyr Gly Ala Tyr Ala His Thr Ala
      370      375      380
Ser Asp Leu Ser Lys Gln Leu Ala Leu Ile Ile Arg Gln Lys Pro Thr
385      390      395      400
Ile Tyr Asp Tyr Gly Cys Thr Val Val Thr Ala Ser Leu Val Asn Pro
      405      410      415
Asn Pro Ile Asp Asn Gln Ala Val Val Asp Ser Tyr Leu Lys Trp Ile
      420      425      430
Glu Asn Glu Ile Thr Leu Asp His Ile Lys His Phe Ile Ala Ile Tyr
      435      440      445
Thr Gln Thr Leu Val Thr Pro Leu Ile Ala Tyr Ile Gln Asn Tyr Gly
      450      455      460
Ile Ala Leu Glu Ala His Met Gln Asn Thr Ile Val Asn Leu Gly Pro
465      470      475      480
Asn Tyr Lys Met Lys Phe Ile Val Arg Asp Leu Gly Gly Ser Arg Ile
      485      490      495
Asp Leu Asn Thr Leu Lys Gln Lys Val Pro Gln Ile Asp Val Thr Asn
      500      505      510
Glu Ser Leu Ile Ala Asp Thr Ile Glu Glu Val Ile Ala Lys Phe Gln
      515      520      525
His Ala Val Ile Gln Asn Gln Leu Ala Glu Leu Ile His His Phe Asn
      530      535      540
Gln Tyr Asp Glu Val Ile Glu Glu Glu Leu Phe Glu Ile Val Arg Glu
545      550      555      560
Glu Ile Glu Met Ala Ile Asp Asn Asp Lys Pro His Ala Glu Lys Leu
      565      570      575
Lys Lys Ile Leu Phe Gly Ser Thr Ile Thr Val Lys Ala Leu Leu Ser
      580      585      590
Met Arg Met Glu Asn Lys Val Lys Lys Tyr Leu Asn Thr Lys Leu Asp
      595      600      605
Asn Pro Ile Lys Lys Glu Val
610      615

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&lt;210&gt; 6416

&lt;211&gt; 450

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6416

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Lys Gly Ser Phe Phe Met Asn Leu Lys Ser Ile Ile Thr Val Met Ala
1      5      10      15
Leu Ile Leu Ile Met Phe Met Ala Ala Ile Glu Thr Ser Ile Ile Ser
      20      25      30
Leu Ala Leu Pro Thr Ile Lys Asn Ser Leu Asn Ala Gly Asn Leu Val
      35      40      45
Ser Leu Val Phe Thr Val Tyr Phe Ile Ala Leu Val Ile Ala Asn Pro
      50      55      60
Ile Val Gly Glu Leu Met Ser Arg Phe Lys Ile Ile Tyr Ile Ala Val
65      70      75      80
Val Gly Val Leu Leu Phe Ala Leu Gly Ser Leu Met Ser Gly Leu Ser

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85 90 95  
 Gln Thr Phe Thr Phe Leu Ile Ile Ser Arg Thr Val Gln Gly Phe Gly  
 100 105 110  
 Ala Gly Val Met Met Ser Leu Ser Gln Ile Val Pro Lys Leu Ala Phe  
 115 120 125  
 Glu Ile Pro Leu Arg Tyr Lys Ile Met Gly Ile Val Gly Ser Val Trp  
 130 135 140  
 Gly Ile Ser Ser Ile Ile Gly Pro Leu Leu Gly Gly Ala Ile Leu Glu  
 145 150 155 160  
 Phe Ala Ser Trp His Trp Leu Phe Tyr Ile Asn Ile Pro Ile Ala Ile  
 165 170 175  
 Val Ala Ile Ile Leu Val Leu Met Thr Phe His Phe Pro Asp Glu Thr  
 180 185 190  
 Gln Val Gln Gln Ser Arg Phe Asp Ile Lys Gly Leu Ile Phe Tyr  
 195 200 205  
 Ile Phe Ile Ala Leu Leu Met Phe Gly Leu Leu Asn Gln His His Ile  
 210 215 220  
 Ile Phe Asn Ile Phe Ser Ile Ile Leu Ala Leu Ala Val Leu Trp Leu  
 225 230 235 240  
 Leu Phe Lys Ile Glu Asn Ser Ile Glu Gln Pro Phe Leu Pro Thr Lys  
 245 250 255  
 Glu Phe Asn Ile Ser Ile Val Leu Val Phe Ile Thr Asp Leu Leu Ile  
 260 265 270  
 Ala Ile Thr Leu Met Gly Tyr Asn Leu Tyr Ile Pro Val Tyr Leu Gln  
 275 280 285  
 Glu Lys Leu Ser Leu Ser Pro Leu Gln Ser Gly Phe Val Ile Phe Pro  
 290 295 300  
 Leu Ser Val Ala Trp Ile Thr Leu Asn Phe Asn Leu Gly Lys Ile Glu  
 305 310 315 320  
 Ala His Phe Thr Arg Lys Thr Leu Tyr Ile Cys Ser Phe Phe Val Leu  
 325 330 335  
 Leu Val Ser Ser Leu Met Ile Met Phe Gly Leu Lys Leu Pro Leu Leu  
 340 345 350  
 Ile Ala Phe Ala Val Val Phe Ala Gly Leu Ser Phe Gly Tyr Ile Tyr  
 355 360 365  
 Thr Lys Asp Ser Val Ile Val Gln Glu Glu Thr Ser Pro Lys Asn Met  
 370 375 380  
 Lys Lys Met Met Ser Phe Tyr Ala Leu Thr Lys Asn Leu Gly Ser Ser  
 385 390 395 400  
 Val Gly Ser Thr Ile Met Gly Tyr Met Tyr Ala Leu Asn Val Gly Leu  
 405 410 415  
 Phe Gly Ser Asn Leu His Asn Val Leu Gly Leu Val Leu Ile Ile Ala  
 420 425 430  
 Val Cys Leu Ile Val Met Trp Met Thr Leu Tyr Lys Ser Asn Thr Ile  
 435 440 445  
 Gln Ser  
 450

&lt;210&gt; 6417

&lt;211&gt; 74

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6417

Ala His Gly Phe Lys Phe Ser Phe Thr Pro Leu Pro Gly Tyr Phe Ser  
 1 5 10 15

Pro Phe Pro His Gly Thr Gly Ser Leu Ser Val Thr Arg Glu Tyr Leu  
                   20                  25                  30  
 Ala Leu Gly Asp Gly Pro Pro Arg Phe Arg Arg Asn Phe Thr Cys Ser  
                   35                  40                  45  
 Val Val Leu Arg Ile His Ser Arg Glu Asn Met Phe Ser Thr Thr Gly  
           50                  55                  60  
 Leu Leu Pro Ser Leu Ile His Leu Ser Arg  
 65                  70

<210> 6418

<211> 45

<212> PRT

<213> S.epidermidis

<400> 6418

Pro Cys Leu Cys Leu Cys Phe Gly Leu Ser Gln Ile Thr Ile Thr Leu  
 1                  5                  10                  15  
 Pro Leu Arg Leu Met Thr Leu His Phe Ser His Ile Gly Phe Thr Asp  
                   20                  25                  30  
 Gly Leu Thr Phe Ile Phe Ile Pro Pro Tyr Ile Met Glu  
                   35                  40                  45

<210> 6419

<211> 112

<212> PRT

<213> S.epidermidis

<400> 6419

Lys Leu Ile Trp Val Cys Gly Val Lys Leu His Ala His Asn Lys Lys  
 1                  5                  10                  15  
 Gly Gly Ala Gln Met Ala Arg Ser Ile Lys Lys Gly Pro Phe Val Asp  
                   20                  25                  30  
 Asp His Leu Met Lys Lys Val Glu Ala Gln Asp Gly Ser Glu Lys Lys  
                   35                  40                  45  
 Gln Val Ile Lys Thr Trp Ser Arg Arg Ser Thr Ile Phe Pro Asn Phe  
                   50                  55                  60  
 Ile Gly His Thr Phe Ala Val Tyr Asp Gly Arg Lys His Val Pro Val  
 65                  70                  75                  80  
 Tyr Val Thr Glu Asp Met Val Gly His Lys Leu Gly Glu Phe Ala Pro  
                   85                  90                  95  
 Thr Arg Thr Phe Lys Gly His Ala Ala Asp Asp Lys Lys Thr Arg Arg  
                   100                  105                  110

<210> 6420

<211> 51

<212> PRT

<213> S.epidermidis

<400> 6420

Leu Phe Ser Trp Met Gly Tyr Ser Glu Leu Asp Asn Ile Cys Met Trp  
 1                  5                  10                  15  
 Gln Thr Leu Ser Leu His Ser Phe Ala Leu Tyr Ile Ser Ser Lys Cys  
                   20                  25                  30  
 Val Phe Ile Lys Val Arg Gln Leu Ser Tyr Asn Leu Cys Leu Lys Ile  
                   35                  40                  45  
 Arg Leu Asn

50

&lt;210&gt; 6421

&lt;211&gt; 440

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6421

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Lys | Arg | Trp | Ser | Thr | Arg | Gly | Asp | Leu | Met | Phe | Gln | Thr | Phe | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Arg | Phe | Phe | Thr | Thr | Lys | Glu | Val | Arg | Asn | Lys | Ile | Phe | Phe | Thr | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Met | Leu | Val | Ile | Phe | Lys | Ile | Gly | Thr | Tyr | Ile | Pro | Ala | Pro | Gly |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | Asn | Pro | Glu | Ala | Phe | Asn | His | Pro | Gln | Gly | Ser | Gln | Gly | Ala | Thr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Leu | Leu | Asn | Thr | Phe | Gly | Gly | Gly | Ala | Leu | Lys | Arg | Phe | Ser | Ile |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Phe | Ala | Met | Gly | Ile | Met | Pro | Tyr | Ile | Thr | Ala | Ser | Ile | Val | Met | Gln |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Leu | Gln | Met | Asp | Ile | Val | Pro | Lys | Phe | Thr | Glu | Trp | Ala | Lys | Gln |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | Glu | Met | Gly | Arg | Arg | Lys | Ile | Asn | Asn | Val | Thr | Arg | Tyr | Phe | Ala |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ile | Ile | Leu | Ala | Phe | Ile | Gln | Ser | Ile | Gly | Met | Ala | Phe | Gln | Phe | Asn |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asn | Tyr | Leu | Lys | Gly | Gln | Leu | Ile | Ile | Glu | Lys | Ser | Val | Met | Ser | Tyr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Leu | Leu | Ile | Ala | Val | Val | Leu | Thr | Ala | Gly | Thr | Ala | Phe | Leu | Ile | Trp |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Leu | Gly | Asp | Gln | Ile | Thr | Gln | Phe | Gly | Val | Gly | Asn | Gly | Ile | Ser | Leu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ile | Ile | Phe | Ala | Gly | Ile | Leu | Ser | Thr | Leu | Pro | Ser | Ser | Leu | Glu | Gln |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Phe | Ala | Gln | Ser | Val | Phe | Val | Gly | Gln | Asp | Asp | Thr | Ser | Leu | Ala | Trp |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Leu | Lys | Ile | Leu | Gly | Leu | Ile | Val | Ala | Leu | Ile | Leu | Leu | Thr | Val | Gly |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ala | Ile | Phe | Val | Leu | Glu | Ala | Lys | Arg | Lys | Ile | Pro | Ile | Gln | Tyr | Ala |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Lys | Lys | Gln | Ser | Ala | Gln | Arg | Leu | Gly | Ser | Gln | Ala | Thr | Tyr | Leu | Pro |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Leu | Lys | Val | Asn | Ser | Ala | Gly | Val | Ile | Pro | Val | Ile | Phe | Ala | Met | Ala |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Phe | Phe | Leu | Leu | Pro | Arg | Thr | Leu | Thr | Leu | Phe | Phe | Pro | Lys | Ala | Glu |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Trp | Ala | Gln | Asn | Ile | Ala | Asp | Thr | Ala | Asn | Pro | Ser | Ser | Asn | Ile | Gly |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Met | Ile | Ile | Tyr | Val | Val | Leu | Ile | Ile | Ala | Phe | Ala | Tyr | Phe | Tyr | Ala |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Phe | Val | Gln | Val | Asn | Pro | Glu | Lys | Met | Ala | Asp | Asn | Leu | Lys | Lys | Gln |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Gly | Ser | Tyr | Val | Pro | Gly | Ile | Arg | Pro | Gly | Glu | Gln | Thr | Lys | Lys | Tyr |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Ile | Thr | Lys | Val | Leu | Tyr | Arg | Leu | Thr | Phe | Val | Gly | Ser | Ile | Phe | Leu |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |

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Ala Ala Ile Ala Ile Leu Pro Ile Ile Ala Thr Lys Phe Met Gly Leu  
 385 390 395 400  
 Pro Gln Ser Ile Gln Ile Gly Gly Thr Ser Leu Leu Ile Val Ile Gly  
 405 410 415  
 Val Ala Ile Glu Thr Met Lys Thr Leu Glu Ala Gln Val Thr Gln Lys  
 420 425 430  
 Glu Tyr Lys Gly Phe Gly Gly Arg  
 435 440

<210> 6422  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

<400> 6422  
 Ile Val Leu Leu Leu Tyr Asn Val Ile His Ile Thr Ile Lys His Thr  
 1 5 10 15  
 Ala Ile Ile Lys Thr Asn Pro Asn Thr Leu Cys Lys Leu Glu Pro Asn  
 20 25 30  
 Lys Pro Thr Phe Ser Ala Tyr Ile  
 35 40

<210> 6423  
 <211> 96  
 <212> PRT  
 <213> S.epidermidis

<400> 6423  
 Gly Gly Ala Arg Ile Met Glu Ala Arg Asp Val Leu Lys Arg Pro Val  
 1 5 10 15  
 Ile Thr Glu Lys Ser Ser Glu Ala Met Ala Glu Asp Lys Tyr Thr Phe  
 20 25 30  
 Asp Val Asp Thr Arg Ala Asn Lys Thr Gln Val Lys Ile Ala Val Glu  
 35 40 45  
 Glu Ile Phe Asp Val Lys Val Asp Ser Val Asn Ile Ile Asn Tyr Lys  
 50 55 60  
 Pro Lys Lys Lys Arg Met Gly Arg Tyr Gln Gly Tyr Thr Asn Lys Arg  
 65 70 75 80  
 Arg Lys Ala Ile Val Lys Leu Lys Glu Gly Ser Ile Asp Leu Phe Asn  
 85 90 95

<210> 6424  
 <211> 121  
 <212> PRT  
 <213> S.epidermidis

<400> 6424  
 Lys Gln Gln Leu His His Gly Lys Thr Asn Asn Val Arg Glu Asp Ile  
 1 5 10 15  
 Gln Met Asn Arg Asp Glu Val Gln Leu Leu Gly Phe Glu Ile Val Ala  
 20 25 30  
 Tyr Ala Gly Asp Ala Arg Ser Lys Leu Leu Glu Ala Leu Asn Ala Ala  
 35 40 45  
 Lys Asp Ser Glu Phe Asp Lys Ala Glu Gln Leu Val Glu Glu Ala Asn  
 50 55 60  
 Glu Cys Ile Ala Asn Ala His Lys Ala Gln Thr Asn Leu Leu Ala Gln

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Glu | Ala | Lys | Gly | Glu | Asp | Ile | Ala | Tyr | Ser | Ile | Thr | Met | Ile | His | Gly |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gln | Asp | His | Leu | Met | Thr | Thr | Leu | Leu | Leu | Lys | Asp | Leu | Met | Lys | His |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Ile | Glu | Leu | Tyr | Lys | Lys | Gly | Ser |     |     |     |     |     |     |     |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     |     |     |     |     |

&lt;210&gt; 6425

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6425

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Ile | Cys | Arg | Arg | Ala | Phe | Met | Asn | Ile | Ile | Leu | Met | Gly | Leu | Pro |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Ala | Gly | Lys | Gly | Thr | Gln | Ala | Ser | Glu | Ile | Val | Lys | Lys | Phe | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Pro | His | Ile | Ser | Thr | Gly | Asp | Met | Phe | Arg | Lys | Ala | Ile | Lys | Asp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Glu | Thr | Asp | Leu | Gly | Lys | Glu | Ala | Lys | Ser | Tyr | Met | Asp | Arg | Gly | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Val | Pro | Asp | Glu | Val | Thr | Val | Gly | Ile | Val | Lys | Glu | Arg | Ile | Ser |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Glu | Asp | Asp | Ala | Lys | Lys | Gly | Phe | Leu | Leu | Asp | Gly | Phe | Pro | Arg | Thr |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Ile | Asp | Gln | Ala | Glu | Ser | Leu | Asn | Gln | Ile | Met | Ser | Glu | Leu | Asp | Arg |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Glu | Ile | Asp | Ala | Val | Ile | Asn | Ile | Glu | Val | Pro | Glu | Glu | Glu | Leu | Met |
|     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Asn | Arg | Leu | Thr | Gly | Arg | Arg | Ile | Cys | Glu | Lys | Cys | Gly | Thr | Thr | Tyr |
|     | 130 |     |     |     | 135 |     |     |     |     |     | 140 |     |     |     |     |
| His | Leu | Val | Phe | Asn | Pro | Pro | Lys | Val | Asp | Gly | Ile | Cys | Asp | Ile | Asp |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |     |
| Gly | Gly | Lys | Leu | Tyr | Gln | Arg | Glu | Asp | Asp | Asn | Pro | Glu | Thr | Val | Ser |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Asn | Arg | Leu | Ser | Val | Asn | Val | Lys | Gln | Ser | Lys | Pro | Ile | Leu | Glu | Tyr |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Tyr | Asn | Asn | Lys | Gly | Val | Leu | Lys | Asn | Ile | Asp | Gly | Ser | Lys | Asp | Ile |
|     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |     |
| Asp | Glu | Val | Thr | Asn | Asp | Val | Ile | Asp | Ile | Leu | Asp | His | Leu |     |     |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |

&lt;210&gt; 6426

&lt;211&gt; 59

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6426

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Ala | Arg | Arg | Arg | Phe | Phe | Lys | Ser | Asp | Val | Lys | Ala | His | Gly | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Val | Glu | Gly | His | Trp | Lys | Leu | Glu | Asn | Leu | Ser | Ala | Glu | Glu | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Gly | Ile | Pro | Cys | Val | Ala | Val | Lys | Cys | Ala | Glu | Ile | Trp | Arg | Asn |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Ser | Gly | Glu | Gly | Asp | Phe | Leu | Val | Cys | Asn |     |     |     |     |     |

50

55

<210> 6427  
 <211> 275  
 <212> PRT  
 <213> S.epidermidis

<400> 6427

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Cys | Ile | Arg | Ser | Gly | Ile | Met | Lys | Asn | Lys | Leu | Ile | Ile | Gly | Arg |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Tyr | Leu | Pro | Met | Gln | Ser | Ile | Ile | His | Gln | Leu | Asp | Pro | Arg | Ala | Lys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Ile | Phe | Val | Phe | Phe | Phe | Ile | Ile | Leu | Ile | Phe | Phe | Cys | His | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Leu | Gly | Thr | Tyr | Ala | Trp | Leu | Phe | Leu | Phe | Ile | Ile | Leu | Phe | Ile | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Ala | Arg | Ile | Pro | Phe | Trp | Phe | Leu | Ile | Lys | Gly | Leu | Thr | Pro | Ile |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Phe | Phe | Phe | Leu | Val | Phe | Thr | Phe | Ser | Met | His | Val | Leu | Phe | Thr | Asn |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gly | Gly | Ile | Val | Leu | Phe | Gln | Trp | Lys | Phe | Ile | Thr | Ile | Glu | Ser | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Gly | Val | Met | Glu | Gly | Ile | Tyr | Ile | Ser | Leu | Arg | Leu | Ile | Phe | Ile | Val |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Met | Ile | Ala | Thr | Ile | Met | Thr | Leu | Ser | Thr | Ser | Pro | Ile | Asp | Leu | Thr |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asp | Ala | Phe | Glu | Lys | Leu | Phe | Ala | Pro | Leu | Lys | Val | Ile | Lys | Val | Pro |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Val | His | Gln | Leu | Ser | Met | Met | Met | Ser | Ile | Ala | Leu | Arg | Phe | Ile | Pro |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Thr | Leu | Met | Asp | Glu | Leu | Glu | Lys | Ile | Ile | Leu | Ala | Gln | Lys | Ser | Arg |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Gly | Ser | Glu | Ile | Ser | Ser | Gly | Ser | Leu | Ile | Thr | Arg | Ile | Arg | Ala | Phe |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ile | Pro | Ile | Met | Ile | Pro | Leu | Phe | Ile | Ser | Ala | Phe | Gln | Arg | Ala | Glu |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Glu | Leu | Ala | Ile | Ala | Met | Glu | Val | Arg | Gly | Tyr | Asp | Ile | Asn | Ile | Lys |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |
| Arg | Thr | Ser | Tyr | Arg | Leu | Leu | His | Trp | Gln | Tyr | Lys | Asp | Thr | Leu | Thr |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Val | Leu | Leu | Leu | Ile | Pro | Ile | Ala | Thr | Ile | Leu | Phe | Ile | Leu | Lys | Phe |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Ser | Gly | Val |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     | 275 |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6428  
 <211> 140  
 <212> PRT  
 <213> S.epidermidis

<400> 6428

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Ser | Glu | Arg | Arg | Gln | Gln | Ser | Met | Thr | Met | Thr | Asp | Pro | Ile | Ala |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |
| Asp | Met | Leu | Thr | Arg | Val | Arg | Asn | Ala | Asn | Met | Val | Arg | His | Glu | Lys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Leu | Glu | Leu | Pro | Ala | Ser | Asn | Ile | Lys | Lys | Glu | Ile | Ala | Glu | Ile | Leu |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |  |  |  |  |
| Lys | Ser | Glu | Gly | Phe | Ile | Lys | Asn | Val | Glu | Tyr | Val | Glu | Asp | Asp | Lys |  |  |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |  |  |
| Gln | Gly | Val | Ile | Arg | Leu | Phe | Leu | Lys | Tyr | Gly | Gln | Asn | Asn | Glu | Arg |  |  |  |  |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |  |  |  |  |
| Val | Ile | Thr | Gly | Leu | Lys | Arg | Ile | Ser | Lys | Pro | Gly | Leu | Arg | Val | Tyr |  |  |  |  |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |  |  |  |  |
| Ala | Lys | Ala | Asn | Glu | Val | Pro | Lys | Val | Leu | Asn | Gly | Leu | Gly | Ile | Ala |  |  |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |  |  |  |  |
| Leu | Val | Ser | Thr | Ser | Glu | Gly | Val | Ile | Thr | Asp | Lys | Glu | Ala | Arg | Lys |  |  |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |  |  |
| Arg | Asn | Val | Gly | Gly | Glu | Ile | Ile | Ala | Tyr | Val | Trp |     |     |     |     |  |  |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |  |  |

&lt;210&gt; 6429

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6429

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|--|
| Lys | Ile | Met | Ser | Ile | Gln | Phe | Asn | Gln | Val | Ser | Tyr | Ile | Tyr | Gln | Gln |  |  |  |  |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |  |  |  |  |
| Gly | Thr | Pro | Tyr | Glu | Phe | Glu | Ala | Ile | Lys | Asn | Val | Ser | Leu | Thr | Leu |  |  |  |  |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     |     | 30  |     |     |  |  |  |  |
| Glu | Gln | Gly | Lys | Tyr | Tyr | Ala | Ile | Ile | Gly | Gln | Thr | Gly | Ser | Gly | Lys |  |  |  |  |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |  |  |  |  |
| Ser | Thr | Leu | Ile | Gln | His | Leu | Asn | Ala | Leu | Leu | Lys | Pro | Thr | Thr | Gly |  |  |  |  |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |  |  |  |  |
| Ser | Val | Asn | Ile | Asn | Gly | Leu | Glu | Val | Thr | Asn | Lys | Thr | Lys | Asp | Lys |  |  |  |  |
| 65  |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |     |  |  |  |  |
| His | Leu | Arg | His | Ile | Arg | Lys | Glu | Val | Gly | Val | Val | Phe | Gln | Phe | Pro |  |  |  |  |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |  |  |  |  |
| Glu | Ser | Gln | Leu | Phe | Glu | Asp | Ser | Val | Glu | Lys | Glu | Ile | Glu | Phe | Gly |  |  |  |  |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |  |  |  |  |
| Pro | Lys | Asn | Phe | Asn | Met | Asn | Leu | Lys | Asn | Val | Lys | Asp | Lys | Ala | Phe |  |  |  |  |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |  |  |  |  |
| Gln | Leu | Leu | Leu | Glu | Leu | Gly | Phe | Ser | Arg | Asn | Val | Met | Ser | Ser | Ser |  |  |  |  |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |  |  |  |  |
| Pro | Phe | Gln | Met | Ser | Gly | Gly | Gln | Met | Arg | Lys | Ile | Ala | Ile | Val | Ser |  |  |  |  |
| 145 |     |     |     | 150 |     |     |     |     |     | 155 |     |     |     |     | 160 |  |  |  |  |
| Ile | Leu | Ala | Met | Asp | Pro | Gln | Val | Ile | Ile | Leu | Asp | Glu | Pro | Thr | Ala |  |  |  |  |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |  |  |  |  |
| Gly | Leu | Asp | Pro | Asn | Ser | Lys | His | Gln | Val | Met | Ser | Leu | Ile | Lys | Lys |  |  |  |  |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     |     | 190 |     |  |  |  |  |
| Ile | Gln | Ile | Glu | Glu | Asn | Lys | Thr | Ile | Ile | Leu | Val | Ser | His | Asp | Met |  |  |  |  |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |  |  |  |  |
| Asp | Asp | Val | Ala | Arg | Tyr | Ser | Asp | Glu | Val | Val | Val | Met | Asn | Lys | Gly |  |  |  |  |
|     | 210 |     |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |  |  |  |  |
| Thr | Ile | Val | Glu | Lys | Ser | Asn | Pro | Arg | Asn | Leu | Phe | Asn | Gln | Lys | Thr |  |  |  |  |
| 225 |     |     |     | 230 |     |     |     |     |     | 235 |     |     |     |     | 240 |  |  |  |  |
| Gln | Leu | Leu | Lys | Trp | His | Ile | Glu | Leu | Pro | Lys | Val | Val | Lys | Leu | Gln |  |  |  |  |
|     |     |     | 245 |     |     |     |     | 250 |     |     |     |     |     | 255 |     |  |  |  |  |
| Lys | Asp | Ile | Glu | Lys | Lys | Tyr | Asn | Met | Leu | Phe | Pro | Lys | Leu | Ala | Thr |  |  |  |  |
|     |     | 260 |     |     |     |     | 265 |     |     |     |     |     | 270 |     |     |  |  |  |  |
| Asn | Glu | Glu | Glu | Phe | Val | Lys | Leu | Tyr | Lys | Glu | Trp | His | His | Glu | Glu |  |  |  |  |
|     | 275 |     |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |  |  |  |  |

<210> 6430  
 <211> 44  
 <212> PRT  
 <213> S.epidermidis

<400> 6430  
 Asn Ala Gln Arg Tyr Gly Gly Thr Pro Val Ala Lys Ala Thr Phe Trp  
 1 5 10 15  
 Ser Val Thr Asp Ala Asp Val Arg Lys Arg Gly Asp Gln Thr Gly Leu  
 20 25 30  
 Asp Thr Leu Val Val His Ala Val Asn Asp Glu Cys  
 35 40

<210> 6431  
 <211> 185  
 <212> PRT  
 <213> S.epidermidis

<400> 6431  
 Ile Ile Arg Arg Cys His Asn Met Ser Arg Val Gly Lys Lys Ile Ile  
 1 5 10 15  
 Asp Ile Pro Ser Asp Val Thr Val Thr Phe Asp Gly Ser His Val Thr  
 20 25 30  
 Val Lys Gly Pro Lys Gly Glu Leu Glu Arg Thr Leu Asn Glu Arg Met  
 35 40 45  
 Thr Phe Lys Gln Glu Glu Asn Thr Val Glu Val Val Arg Pro Ser Asp  
 50 55 60  
 Ser Lys Glu Asp Arg Thr Asp His Gly Thr Thr Arg Ala Leu Leu Asn  
 65 70 75 80  
 Asn Met Val Leu Gly Val Ser Gln Gly Tyr Glu Lys Thr Leu Glu Leu  
 85 90 95  
 Val Gly Val Gly Tyr Arg Ala Gln Met Gln Gly Lys Asp Leu Val Leu  
 100 105 110  
 Asn Val Gly Tyr Ser His Pro Val Glu Ile Lys Ala Glu Glu Gly Ile  
 115 120 125  
 Thr Phe Ala Val Glu Lys Asn Thr Thr Val Lys Val Ser Gly Val Ser  
 130 135 140  
 Lys Glu Gln Val Gly Ala Ile Ala Ser Asn Ile Arg Ser Val Arg Pro  
 145 150 155 160  
 Pro Glu Pro Tyr Lys Gly Lys Gly Ile Arg Tyr Gln Gly Glu Tyr Val  
 165 170 175  
 Arg Arg Lys Glu Gly Lys Thr Gly Lys  
 180 185

<210> 6432  
 <211> 348  
 <212> PRT  
 <213> S.epidermidis

<400> 6432  
 Met Lys Arg Arg Cys Val Phe Met Arg Leu Ser Leu Leu Asp Tyr Val  
 1 5 10 15  
 Pro Leu Phe Glu Gly Arg Thr Pro Asn Asp Ala Leu Lys His Ser Ile  
 20 25 30  
 Lys Leu Ala Gln His Ala Glu Lys Leu Gly Tyr Leu Arg Tyr Trp Val

35 40 45  
 Ala Glu His His Gln Val Tyr Ser Val Val Ser Ser Ala Pro Glu Ile  
 50 55 60  
 Ile Met Met Ser Ile Leu Glu His Thr Gln His Ile Arg Val Gly Ser  
 65 70 75 80  
 Gly Gly Val Met Leu Pro His Tyr Ser Pro Tyr Lys Val Ala Glu Gln  
 85 90 95  
 Phe Lys Ile Met Glu Ala Arg His Pro Gln Arg Ile Asp Met Ala Ile  
 100 105 110  
 Gly Arg Ser Pro Ser Phe Lys Asn Val Asn Ala Ala Leu Asn Glu Asn  
 115 120 125  
 Lys Asn Glu Lys Leu Pro Phe Asn Thr Gln Ile Thr Asp Leu Leu Lys  
 130 135 140  
 Tyr Phe Asn Asn Asp Thr Thr Gln Asp His Arg Phe Lys Ser Leu Leu  
 145 150 155 160  
 Ala Thr Pro Met Val Thr Ser Phe Pro Gln Leu Tyr Ile Leu Gly Met  
 165 170 175  
 Ser Asn Arg Ser Ala Lys Leu Ala Ala Gln Arg Gly Leu Pro Phe Val  
 180 185 190  
 Ile Ala Arg Met Gly Gln Ser Glu Thr Asp Leu His Glu Ala Ile Ser  
 195 200 205  
 Thr Tyr Arg Lys Tyr Phe Lys Ala Tyr His Gly Glu Ile Asn Asn Ala  
 210 215 220  
 Lys Pro Tyr Val Ile Leu Ala Thr Phe Val Val Thr Ala Ser Asn Leu  
 225 230 235 240  
 Ser Arg Val Lys Gln Leu Leu His Thr Leu Gln Leu Trp Leu Met Arg  
 245 250 255  
 Ile Asn Tyr Leu Asn Gln Pro Lys Ser Tyr Pro Ser Ile Glu Thr Ala  
 260 265 270  
 Gln Asn Lys His Tyr Ser Gln Arg Glu Leu Glu Lys Leu Glu Lys Met  
 275 280 285  
 Lys Ser Lys Ile Ile Tyr Gly Met Pro Asn Asp Val Ala Glu Gln Leu  
 290 295 300  
 Thr Leu Leu His Gln Gln Phe Lys Val Asp Glu Ile Ile Ile Leu Pro  
 305 310 315 320  
 His Val Phe Gly Glu Asp Ala Arg Met Glu Leu Ile Glu Leu Ile Ala  
 325 330 335  
 Asn Glu Leu Ile Pro Ser Cys Ser Arg Asp Glu Phe  
 340 345

&lt;210&gt; 6433

&lt;211&gt; 76

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6433

Thr Tyr Asn Gly Ile Ser Lys Ala Gly Pro Thr Ile Asp Asn Ile Met  
 1 5 10 15  
 Ile Ile Glu Val Ile Val Glu Lys Gln Asn Ile Leu Leu Leu Asn Ile  
 20 25 30  
 Phe Lys Phe Asn Asn Gly Leu Glu Ile Val Ile Cys Arg Leu Thr Lys  
 35 40 45  
 Met Pro Met Met Ile Lys Leu Ile Lys Ser Glu Gln Arg Thr Ile Gly  
 50 55 60  
 Leu Glu Lys Pro Arg Leu Pro Ala Leu Leu Lys Ala  
 65 70 75

<210> 6434  
 <211> 215  
 <212> PRT  
 <213> S.epidermidis

<400> 6434

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Lys Ala Lys Gly Gly Asn Cys Ile Met Ala Asn Tyr Asp Val Leu Lys
1      5      10      15
Val Asp Gly Ser Lys Ser Gly Ser Val Glu Leu Asn Asp Ala Val Phe
20     25     30
Ala Ile Glu Pro Asn Asn Ser Val Leu Phe Glu Ala Ile Asn Leu Gln
35     40     45
Arg Ala Ser Leu Arg Gln Gly Thr His Ala Val Lys Asn Arg Ser Ala
50     55     60
Val Arg Gly Gly Gly Arg Lys Pro Trp Arg Gln Lys Gly Thr Gly Arg
65     70     75     80
Ala Arg Gln Gly Thr Ile Arg Ala Pro Gln Trp Arg Gly Gly Gly Val
85     90     95
Val Phe Gly Pro Thr Pro Arg Ser Tyr Ala Tyr Lys Met Pro Lys Lys
100    105    110
Met Arg Arg Leu Ala Leu Arg Ser Ala Leu Ser Phe Lys Val Gln Glu
115    120    125
Asn Ser Phe Thr Ile Val Asp Thr Phe Gly Phe Glu Ala Pro Lys Thr
130    135    140
Lys Glu Phe Lys Asn Val Leu Thr Thr Leu Glu Gln Pro Lys Lys Val
145    150    155    160
Leu Val Val Thr Glu Ser Glu Asp Val Asn Val Glu Leu Ser Ala Arg
165    170    175
Asn Ile Pro Gly Val Gln Val Thr Thr Ala Gln Gly Leu Asn Val Leu
180    185    190
Asp Leu Thr Ser Ala Asp Ser Val Ile Ile Thr Glu Ala Ala Ala Lys
195    200    205
Lys Val Glu Glu Val Leu Ala
210    215

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<210> 6435  
 <211> 185  
 <212> PRT  
 <213> S.epidermidis

<400> 6435

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Leu Lys Gly Gly Ser Thr Leu Asn Arg Leu Lys Glu Lys Phe Asn Thr
1      5      10      15
Glu Val Thr Glu Asn Leu Val Lys Lys Phe Asn Tyr Ser Ser Val Met
20     25     30
Glu Val Pro Lys Ile Glu Lys Ile Val Val Asn Met Gly Val Gly Asp
35     40     45
Ala Val Gln Asn Ser Lys Val Leu Asp Asn Ala Val Glu Glu Leu Glu
50     55     60
Leu Ile Thr Gly Gln Lys Pro Leu Val Thr Lys Ala Lys Lys Ser Val
65     70     75     80
Ala Thr Phe Arg Leu Arg Glu Gly Met Pro Ile Gly Ala Lys Val Thr
85     90     95
Leu Arg Gly Glu Arg Met Tyr Glu Phe Leu Asp Lys Leu Ile Ala Val
100    105    110

```

Ser Leu Pro Arg Val Arg Asp Phe Gln Gly Val Ser Lys Thr Ala Phe  
 115 120 125  
 Asp Gly Arg Gly Asn Tyr Thr Leu Gly Val Lys Glu Gln Leu Ile Phe  
 130 135 140  
 Pro Glu Ile Asp Tyr Asp Lys Val Thr Lys Val Arg Gly Met Asp Ile  
 145 150 155 160  
 Val Ile Val Thr Thr Ala Asn Thr Asp Glu Glu Ala Arg Glu Leu Leu  
 165 170 175  
 Thr Asn Phe Gly Met Pro Phe Arg Lys  
 180 185

<210> 6436

<211> 55

<212> PRT

<213> S.epidermidis

<400> 6436

Tyr Phe Tyr Ile Thr Lys His Ser Thr Ile Ile Gln Ile Asp Cys Ile  
 1 5 10 15  
 Ser Asp Met Tyr Asn Leu Ile Ile Cys Asn Met Asn Tyr Lys Lys Ser  
 20 25 30  
 Tyr Ser Val Ile Asn Tyr Ser Leu Asn Lys Lys Ala Arg Thr Pro Ser  
 35 40 45  
 Asn Val Glu Phe Thr Leu Lys  
 50 55

<210> 6437

<211> 119

<212> PRT

<213> S.epidermidis

<400> 6437

Met Ile Asn Ile Ile Leu Lys Lys Ile Asp Leu Glu Val Ile Arg Met  
 1 5 10 15  
 Phe Val Val Thr Asn Arg Ile Thr Val Lys Lys Gly Tyr Ala Lys Gln  
 20 25 30  
 Met Ala Pro Asn Phe Thr Lys Gly Gly Pro Ile Glu Ser Leu Lys Gly  
 35 40 45  
 Phe Glu Gly Ile Glu Val Trp Gln Ile Asp Lys Asp Asp Tyr Ser Glu  
 50 55 60  
 Asp Met Tyr Val Asn Ser Trp Trp Glu Thr Glu Glu Asp Phe Lys Asn  
 65 70 75 80  
 Trp Val Asn Ser Asp Val Phe Lys Gln Ala His Lys Asn Thr Gly Lys  
 85 90 95  
 Ser Glu Asp Ser Pro Val Ile Lys Ser Glu Ile Val Lys Ser Asn Val  
 100 105 110  
 Leu Ser Ser Leu Asn Arg Arg  
 115

<210> 6438

<211> 268

<212> PRT

<213> S.epidermidis

<400> 6438

Ile Leu Arg Ile Leu Val Glu Ile Ala Tyr Gln Gly Asn Gln Phe Leu



```

1           5           10           15
Gly Phe Gln Ile Gln Gln Gln Gly Arg Thr Val Gln Gln Gln Phe Glu
      20           25           30
Lys Ile Leu Lys Arg Met His Lys His His Val Arg Ile His Pro Ser
      35           40           45
Ser Arg Thr Asp Arg Gly Val His Ala Tyr Gln Gln Phe Phe His Phe
      50           55           60
Asp Thr Glu Leu Asn Ile Asp Asn Lys Gln Trp Gln Tyr Ala Met Asn
65           70           75           80
Arg Ala Leu Pro Asp Ile Tyr Val Lys Asn Val Arg Asn Val Asp
      85           90           95
Glu Tyr Phe His Cys Arg Tyr Asp Cys Val Gly Lys Arg Tyr Arg Tyr
      100          105          110
Lys Val Tyr Gln Gly Asn His Arg Asn Pro Phe Lys Ser Gly Thr Glu
      115          120          125
Thr Phe Val Tyr Glu Thr Leu Asp Tyr Asp Lys Met Asn Lys Ala Ala
      130          135          140
Gln Glu Phe Ile Gly Thr His Asp Phe Thr Gly Phe Cys Ser Gln Lys
145          150          155          160
Thr Glu Val Glu Ser Lys Val Arg Thr Leu Tyr Gln Ser Glu Ile Val
      165          170          175
Ala Thr Lys Glu Gly Phe Asp Tyr Val Val Thr Gly Ser Gly Phe Leu
      180          185          190
Tyr Asn Met Val Arg Val Leu Val Ala Phe Leu Ile Glu Val Gly Lys
      195          200          205
Gly Lys His Glu Pro Asn Asp Val Pro Lys Leu Leu Glu Asp Lys Asn
      210          215          220
Arg Asn Asn Val Pro Leu Thr Ala Pro Pro Asp Gly Leu Tyr Leu Glu
225          230          235          240
Lys Ile Tyr Leu Ser Pro Glu Glu Leu Ile Gln Glu Tyr Gly Lys Asp
      245          250          255
Ile Lys Ile His Tyr Lys Lys Ser Leu Glu Lys His
      260          265

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<210> 6439  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

<400> 6439  
 Asn Arg Phe Ile Ile Leu Glu Val Tyr His Leu Leu Ser Tyr Glu Phe  
 1 5 10 15  
 Lys Ile Tyr Ile Val Ala Phe Asn Ile Asn Phe Tyr Phe Leu Tyr Asp  
 20 25 30  
 Tyr Phe Asp Phe Gln Lys, Tyr Tyr  
 35 40

<210> 6440  
 <211> 347  
 <212> PRT  
 <213> S.epidermidis

<400> 6440  
 His Asn Ser Ile Asn Tyr Tyr Tyr Lys Asp Asp Asp Asp Met Asn Asn  
 1 5 10 15  
 Glu Gln Ile Val Phe Asn Lys Val Pro Asp Gly Met Pro Gln Asp Asp

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      20      25      30
Thr Phe Lys Tyr Glu Asp Ile Asp Val Ile Glu Pro Ser Glu Asn Glu
      35      40      45
Leu Gln Leu Lys Thr Leu Tyr Ile Ser Val Asp Pro Tyr Met Arg Gly
      50      55      60
Arg Met Thr Asn Ala Asp Ser Tyr Ile Asp Pro Phe Lys Gln Gly Glu
      65      70      75      80
Pro Phe Asn Gly His Thr Val Ser Lys Val Leu Lys Ser Lys Asp Ser
      85      90      95
Asn Phe Asp Glu Gly Asp Ile Val Val Gly Met Leu Pro Trp Arg Lys
      100      105      110
Ile Asn Thr Val Asn Ser Glu Tyr Val Asn Lys Val Pro Thr Ser Asp
      115      120      125
Val Pro Leu His Leu Tyr Leu Ser Val Leu Gly Met Pro Gly Gln Thr
      130      135      140
Ala Tyr His Gly Leu Leu Asp Ile Gly Gln Pro Lys Glu Gly Glu Thr
      145      150      155      160
Val Val Ile Ser Ala Ala Ser Gly Ala Val Gly Ser Val Val Gly Gln
      165      170      175
Ile Ala Lys Leu Lys Gly Cys Arg Val Val Gly Ile Ala Gly Gly Asp
      180      185      190
Lys Lys Val Asn Tyr Leu Lys Asn Glu Leu Arg Phe Asp Ala Gly Ile
      195      200      205
Asp Tyr Lys Lys Asp Asn Phe Pro Glu Ala Leu Lys Glu Ala Val Pro
      210      215      220
Asn Gly Ile Asp Val Tyr Phe Glu Asn Val Gly Gly Tyr Ile Gly Asp
      225      230      235      240
Glu Val Phe Lys His Leu Asn Thr His Ala Arg Ile Pro Val Cys Gly
      245      250      255
Ala Ile Ser Ser Tyr Asn His Pro Glu Lys Asp Ile Gly Pro Arg Ile
      260      265      270
Gln Gln Thr Leu Ile Lys Asn Gln Ala Met Met Arg Gly Phe Ile Val
      275      280      285
Ala Glu Phe Ala Asp Gly Phe Lys Glu Ala Ser Lys Gln Leu Ala Gln
      290      295      300
Trp Val Gln Glu Asn Lys Ile Lys Thr Gln Val Ser Val Glu Asp Gly
      305      310      315      320
Phe Asp Lys Val Pro Gln Ala Phe Arg Asn Leu Leu Thr Gly Asp Asn
      325      330      335
Phe Gly Lys Gln Val Ile Lys Val Ala Ser Glu
      340      345

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&lt;210&gt; 6441

&lt;211&gt; 411

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6441

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Ser Ile Leu Met Ile Met Ile Ile Ile Ile Asn Glu Lys Asp Arg Trp
1.      5      10      15
Asn Leu Met Ala Lys Tyr Phe Phe Ser Ser Ser Phe Leu Leu Phe Leu
      20      25      30
Gly Asn Trp Ile Gly Gln Val Gly Leu Asn Trp Phe Val Leu Thr Thr
      35      40      45
Tyr His Asn Ala Val Tyr Leu Gly Leu Val Asn Phe Cys Arg Leu Ile
      50      55      60

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Pro Ile Leu Leu Leu Ser Val Trp Ala Gly Ser Ile Ala Asp Lys Tyr  
 65 70 75 80  
 Asp Lys Gly Leu Leu Leu Arg Ile Thr Ile Thr Ser Ser Phe Ile Ile  
 85 90 95  
 Thr Ala Leu Leu Cys Leu Leu Thr Tyr Ser Leu Asn Ser Ile Pro Ile  
 100 105 110  
 Phe Ile Ile Leu Leu Tyr Ala Thr Phe Arg Gly Ile Leu Ser Ala Val  
 115 120 125  
 Glu Thr Pro Val Arg Gln Ala Val Leu Pro Asp Leu Ser Ser Lys Ile  
 130 135 140  
 Ser Thr Thr Gln Ala Val Ser Phe His Ser Phe Ile Ile Asn Ile Cys  
 145 150 155 160  
 Arg Ser Ile Gly Pro Ala Ile Ala Gly Gly Leu Ile Ala Val Tyr His  
 165 170 175  
 Thr Pro Thr Thr Phe Leu Ala Gln Ala Val Cys Tyr Phe Ile Ala Ala  
 180 185 190  
 Val Leu Cys Ile Pro Ile His Phe Glu Val Ile Leu Ser Gln Lys Glu  
 195 200 205  
 Gly Lys Ala Leu Pro Leu Lys Val Val Leu Asn Tyr Phe Lys Ser Asn  
 210 215 220  
 Leu Glu Gly Ser Gln Ile Phe Ile Thr Ser Ile Ile Ile Met Ala Thr  
 225 230 235 240  
 Gly Phe Ser Tyr Thr Thr Val Leu Pro Val Leu Thr Asn His Ile Phe  
 245 250 255  
 Pro Gly Gln Ser Gln Val Phe Gly Ile Ala Met Thr Phe Cys Ala Ile  
 260 265 270  
 Gly Gly Ile Val Ala Thr Ile Val Leu Pro Ser Ile Leu Lys His Leu  
 275 280 285  
 Ser Thr Val Lys Met Tyr Tyr Leu Ser Ser Ile Leu Phe Gly Ile Ala  
 290 295 300  
 Leu Leu Gly Ile Ile Ile His His Leu Val Val Met Phe Ile Cys Ile  
 305 310 315 320  
 Thr Leu Ile Gly Leu Phe Ser Gln Trp Ala Arg Thr Thr Asn Arg Val  
 325 330 335  
 Tyr Phe Gln His Ser Val Lys Asp Cys Asp Arg Gly Lys Val Leu Ser  
 340 345 350  
 Ile Ile Met Met Asp Arg Gly Met Ile Pro Leu Gly Ser Leu Ile Met  
 355 360 365  
 Ser Phe Phe Ala Asp Met Phe Gly Ile Leu Thr Thr Phe Thr Ile Met  
 370 375 380  
 Gly Ile Ser Thr Ile Ser Ile Ser Leu Ile Phe Tyr Ile Ile Gln Arg  
 385 390 395 400  
 Ile Ser Asn Met Glu Glu Ser Asn Asn Glu Ser  
 405 410

&lt;210&gt; 6442

&lt;211&gt; 179

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6442

Asn Val Leu Ile Gly Gly Ile Lys Met Lys Ile Ala Ile Gly Cys Asp  
 1 5 10 15  
 His Ile Val Thr Asp Thr Lys Met Glu Val Ser Gln His Leu Lys Ser  
 20 25 30  
 Gln Gly His Glu Val Ile Asp Val Gly Thr Tyr Asp Phe Thr Arg Thr

35 40 45  
 His Tyr Pro Ile Tyr Gly Lys Lys Val Gly Glu Lys Val Ala Ser Gly  
 50 55 60  
 Glu Ala Asp Leu Gly Val Cys Ile Cys Gly Thr Gly Val Gly Ile Ser  
 65 70 75 80  
 Asn Ala Ala Asn Lys Val Pro Gly Val Arg Thr Ala Leu Val Arg Asp  
 85 90 95  
 Met Thr Ser Ala Leu Tyr Ser Lys Glu Glu Leu Asn Ala Asn Val Val  
 100 105 110  
 Ser Phe Gly Gly Lys Val Ala Gly Glu Leu Phe Ile Phe Asp Ile Val  
 115 120 125  
 Asp Ala Phe Ile Glu Ala Glu Tyr Lys Pro Thr Glu Glu Asn Lys Lys  
 130 135 140  
 Leu Ile Ala Lys Ile Asn His Leu Glu Ala His Asn Asn Asp Gln Ala  
 145 150 155 160  
 Asp Pro His Phe Phe Asp Glu Phe Leu Glu Lys Trp Asn Lys Gly Glu  
 165 170 175  
 Tyr His Asp

<210> 6443  
 <211> 292  
 <212> PRT  
 <213> S.epidermidis

<400> 6443  
 Arg Gly Leu Met Met Lys Ser Lys Phe Thr Ile Leu Leu Phe Thr Ile  
 1 5 10 15  
 Phe Ser Thr Thr Val Leu Val Leu Val Ile Ile Tyr Asn Lys Thr Gln  
 20 25 30  
 Ser Gln Ser Tyr Ile Ser Thr His Tyr Ser Asn Asn Lys Ile Lys Thr  
 35 40 45  
 Thr Ala Thr Leu Phe Leu His Gly Tyr Gly Gly Ser Glu Arg Ser Glu  
 50 55 60  
 Thr Phe Met Val Lys Gln Ala Leu Asn Lys Asn Val Thr Asn Glu Val  
 65 70 75 80  
 Ile Thr Ala Arg Val Ser Ser Glu Gly Lys Val Tyr Phe Asp Lys Lys  
 85 90 95  
 Leu Ser Glu Asp Ala Ala Asn Pro Ile Val Lys Val Glu Phe Lys Asp  
 100 105 110  
 Asn Lys Thr Gly Asn Phe Lys Glu Asn Ala Tyr Trp Ile Lys Glu Val  
 115 120 125  
 Leu Ser Gln Leu Lys Ser Gln Phe Gly Ile Gln Gln Phe Asn Phe Val  
 130 135 140  
 Gly His Ser Met Gly Asn Ile Ser Phe Ala Phe Tyr Met Lys Asn Tyr  
 145 150 155 160  
 Gly Asp Asp Arg His Leu Pro Gln Leu Lys Lys Glu Val Asn Ile Ala  
 165 170 175  
 Gly Val Tyr Asn Gly Ile Leu Asn Met Asn Glu Asn Val Asn Glu Ile  
 180 185 190  
 Ile Val Asp Lys Gln Gly Lys Pro Ser Arg Met Asn Ala Ala Tyr Arg  
 195 200 205  
 Gln Leu Leu Ser Leu Tyr Lys Ile Tyr Cys Gly Lys Glu Ile Glu Val  
 210 215 220  
 Leu Asn Ile Tyr Gly Asp Leu Glu Asp Gly Ser His Ser Asp Gly Arg  
 225 230 235 240



Thr His Asp Ser Asp Val Glu Ile Leu Asn Pro Glu Leu Lys Ile Ala  
 115 120 125  
 Thr Val Ser Lys Gly Gly His Leu Lys Val Arg Leu Val Ala Asn Lys  
 130 135 140  
 Gly Arg Gly Tyr Ala Leu Ala Glu Gln Asn Asn Thr Ser Asp Leu Pro  
 145 150 155 160  
 Ile Gly Val Ile Pro Val Asp Ser Leu Tyr Ser Pro Val Glu Arg Val  
 165 170 175  
 Asn Tyr Thr Val Glu Asn Thr Arg Val Gly Gln Ser Ser Asp Phe Asp  
 180 185 190  
 Lys Leu Thr Leu Asp Val Trp Thr Asn Gly Ser Ile Thr Pro Gln Glu  
 195 200 205  
 Ser Val Ser Leu Ala Ala Lys Ile Met Thr Glu His Leu Asn Ile Phe  
 210 215 220  
 Val Ser Leu Thr Asp Glu Ala Gln Asn Ala Glu Ile Met Ile Glu Lys  
 225 230 235 240  
 Glu Glu Asp Gln Lys Glu Lys Val Ile Glu Ile Ser Met Glu Glu  
 245 250 255

<210> 6446  
 <211> 42  
 <212> PRT  
 <213> S.epidermidis

<400> 6446  
 Val Val Glu Ile Leu Leu Asp Lys Ser Gly Lys Thr Ala Cys Leu Thr  
 1 5 10 15  
 Gly Val Ser Thr Ala Leu Ser Met Pro Leu Asn Val Ala Tyr Lys Arg  
 20 25 30  
 Met Met Lys Ile Gly Ile Leu Leu Arg Leu  
 35 40

<210> 6447  
 <211> 135  
 <212> PRT  
 <213> S.epidermidis

<400> 6447  
 Lys Glu Glu Ile Thr Leu Ala Gln Val Glu Tyr Lys Gly Thr Gly Arg  
 1 5 10 15  
 Arg Lys Asn Ser Val Ala Arg Val Arg Leu Val Pro Gly Glu Gly Asn  
 20 25 30  
 Ile Thr Val Asn Glu Arg Asp Val Arg Asp Tyr Leu Pro Phe Glu Ser  
 35 40 45  
 Leu Ile Leu Asp Leu Asn Gln Pro Phe Asp Val Thr Glu Thr Lys Gly  
 50 55 60  
 Asn Tyr Asp Val Leu Val Asn Val His Gly Gly Phe Thr Gly Gln  
 65 70 75 80  
 Ala Gln Ala Ile Arg His Gly Ile Ala Arg Ala Leu Leu Glu Ala Asp  
 85 90 95  
 Pro Glu Tyr Arg Gly Ser Leu Lys Arg Ala Gly Leu Leu Thr Arg Asp  
 100 105 110  
 Pro Arg Met Lys Glu Arg Lys Lys Pro Gly Leu Lys Lys Ala Arg Arg  
 115 120 125  
 Ser Pro Gln Phe Ser Lys Arg  
 130 135

<210> 6448  
 <211> 42  
 <212> PRT  
 <213> S.epidermidis

<400> 6448  
 Asn Tyr Met Ile Ile Asn Gly Ile Val Leu Tyr His Pro Thr Ile Ser  
 1 5 10 15  
 Pro Gly Asn Leu Leu Cys Tyr Lys Ile Tyr Lys Gln Ser Arg Thr Thr  
 20 25 30  
 Val Asn Glu Ile Asn Glu Ile Leu Arg Phe  
 35 40

<210> 6449  
 <211> 55  
 <212> PRT  
 <213> S.epidermidis

<400> 6449  
 Asn Asn Thr Ile Pro Pro Leu Val Asn Asn Thr Cys Ile Glu Lys Val  
 1 5 10 15  
 Lys Thr Lys Lys Lys Lys Ile Gly Val Asn Pro Leu Ile Lys Asn Gln  
 20 25 30  
 Lys Gly Met Arg Ala Asn Leu Ile Asn Asn Ile Ile Lys Arg Asn Asn  
 35 40 45  
 His Ala Tyr Val Pro Ser Glu  
 50 55

<210> 6450  
 <211> 475  
 <212> PRT  
 <213> S.epidermidis

<400> 6450  
 Lys Gly Val Leu Tyr Met Thr Lys Lys Leu Pro Asp Asp Phe Ile Phe  
 1 5 10 15  
 Gly Gly Ala Thr Ala Ala Tyr Gln Ala Glu Gly Ala Thr Gln Thr Asp  
 20 25 30  
 Gly Lys Gly Arg Val Ala Trp Asp Thr Tyr Leu Glu Glu Asn Tyr Trp  
 35 40 45  
 Tyr Thr Ala Glu Pro Ala Ser Asp Phe Tyr Asn Arg Tyr Pro Val Asp  
 50 55 60  
 Leu Glu Leu Ser Glu Arg Phe Gly Val Asn Gly Ile Arg Ile Ser Ile  
 65 70 75 80  
 Ala Trp Ser Arg Ile Phe Pro Lys Gly Tyr Gly Glu Val Asn Gln Lys  
 85 90 95  
 Gly Val Glu Tyr Tyr His Asn Leu Phe Lys Glu Cys His Lys Arg His  
 100 105 110  
 Val Glu Pro Phe Val Thr Leu His His Phe Asp Thr Pro Glu Val Leu  
 115 120 125  
 His Lys Asp Gly Asp Phe Leu Asn Arg Lys Thr Ile Asp Tyr Phe Val  
 130 135 140  
 Asp Tyr Ala Glu Phe Cys Phe Lys Glu Phe Pro Glu Val Lys Tyr Trp  
 145 150 155 160  
 Thr Thr Phe Asn Glu Ile Gly Pro Ile Gly Asp Gly Gln Tyr Leu Val

Gly Lys Phe Pro Pro Gly Ile Lys Tyr Asp Phe Glu Lys Val Phe Gln  
 165 170 175  
 180 185 190  
 Ser His His Asn Met Met Val Ala His Ala Arg Ala Val Lys Leu Phe  
 195 200 205  
 Lys Asp Glu Asn Tyr Lys Gly Glu Ile Gly Val Val His Ala Leu Pro  
 210 215 220  
 Thr Lys Tyr Pro Tyr Asp Pro Ser Asn Pro Glu Asp Val Arg Ala Ala  
 225 230 235 240  
 Glu Leu Glu Asp Ile Ile His Asn Lys Phe Ile Leu Asp Ala Thr Tyr  
 245 250 255  
 Leu Gly Lys Tyr Ser Arg Glu Thr Met Glu Gly Val Gln His Ile Leu  
 260 265 270  
 Ser Val Asn Gly Gly Gln Leu Glu Ile Ser Asp Glu Asp Tyr Lys Ile  
 275 280 285  
 Leu Asp Glu Ala Lys Asp Leu Asn Asp Phe Leu Gly Ile Asn Tyr Tyr  
 290 295 300  
 Met Ser Asp Trp Met Arg Gly Phe Glu Gly Glu Ser Glu Ile Thr His  
 305 310 315 320  
 Asn Ala Thr Gly Asp Lys Gly Gly Ser Lys Tyr Gln Leu Lys Gly Val  
 325 330 335  
 Gly Gln Arg Glu Phe Asp Val Asp Val Pro Arg Thr Asp Trp Asp Trp  
 340 345 350  
 Met Ile Tyr Pro Gln Gly Leu Tyr Asp Gln Ile Met Arg Val Val Lys  
 355 360 365  
 Asp Tyr Pro Asn Tyr His Lys Ile Tyr Ile Thr Glu Asn Gly Leu Gly  
 370 375 380  
 Tyr Lys Asp Val Phe Asp Glu Lys Glu Lys Thr Val His Asp Asp Ala  
 385 390 395 400  
 Arg Ile Asp Tyr Ile Lys Gln His Leu Ser Val Ile Ala Asp Ala Ile  
 405 410 415  
 Ala Asp Gly Ala Asn Val Lys Gly Tyr Phe Leu Trp Ser Leu Met Asp  
 420 425 430  
 Val Phe Ser Trp Ser Asn Gly Tyr Glu Lys Arg Tyr Gly Leu Phe Tyr  
 435 440 445  
 Val Asp Phe Glu Thr Gln Glu Arg Phe Pro Lys Lys Ser Ala Tyr Trp  
 450 455 460  
 Tyr Lys Glu Leu Ala Glu Ser Lys Glu Ile Lys  
 465 470 475

&lt;210&gt; 6451

&lt;211&gt; 92

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6451

Leu Lys Glu Val Phe Ser Met Ala Met Thr Val Lys Lys Asn Asp Asn  
 1 5 10 15  
 Glu Val Arg Ile Gln Trp Arg Val Ala Asp Ile Lys Ile Pro Asn Asn  
 20 25 30  
 Glu Ile Lys Asn Val Thr Gln Asp Gln Asp Ile His Ala Val Pro Glu  
 35 40 45  
 Glu Asn Gly Lys Glu Ile Ser Arg Ile Gly Ser Thr Phe Gly Lys Thr  
 50 55 60  
 Asn Arg Val Leu Ile Asp Thr Asp Gln His Leu Tyr Ile Ile Tyr Thr  
 65 70 75 80



Gln Asn Asp Gln Lys Val Tyr Asn Glu Leu Thr Lys  
                   85                                  90

<210> 6452  
 <211> 62  
 <212> PRT  
 <213> S.epidermidis

<400> 6452  
 Ala Val Leu Phe Val Tyr Asp Leu Tyr Phe Tyr Phe Leu Met Gly His  
 1                  5                                  10                  15  
 Gln Asn Asp Ile Val Thr Ser Ile Arg Ala Cys Thr Leu Ile Cys Asn  
                   20                                  25                  30  
 Val Ser Gly Ser Ile Thr Lys Lys Tyr Asp Ile Glu Thr Ile Lys Phe  
                   35                                  40                  45  
 Thr Thr Ser Tyr Val Ile Lys Ile Arg Asn Lys Val Arg Leu  
                   50                                  55                  60

<210> 6453  
 <211> 47  
 <212> PRT  
 <213> S.epidermidis

<400> 6453  
 Trp Ile Ile Phe Arg Lys Asp Leu Phe Lys Pro Arg Arg Ile Asp Thr  
 1                  5                                  10                  15  
 Arg Ile Trp Lys Arg Tyr Lys Asn Thr Leu Gln Lys Ile Val Gly Lys  
                   20                                  25                  30  
 Thr Leu Ile Val Ile Asp Lys Ser Thr Val Lys Leu Tyr Asp Tyr  
                   35                                  40                  45

<210> 6454  
 <211> 54  
 <212> PRT  
 <213> S.epidermidis

<400> 6454  
 Thr Leu Phe Ser Tyr Asp Leu Ala Tyr Ile Tyr Cys Ser Cys Phe Phe  
 1                  5                                  10                  15  
 Leu Thr Tyr Asp Arg His Phe Leu Phe Tyr Val Ile Ala Thr Phe Ser  
                   20                                  25                  30  
 His Tyr Lys Leu Glu Arg Lys Ile Ser Ile Ile Phe Arg Asn Ile Ile  
                   35                                  40                  45  
 Ile Leu Gln Ile Asn Thr  
                   50

<210> 6455  
 <211> 113  
 <212> PRT  
 <213> S.epidermidis

<400> 6455  
 Ser Val Arg Ser Cys Glu Ile Asn Ser Ile Cys Arg Ser Ser Leu Glu  
 1                  5                                  10                  15  
 His Pro Thr Lys Arg Val Leu Ala Pro Cys Cys Gly Lys Cys Arg Ala  
                   20                                  25                  30

Phe Tyr Phe Gln Asn Asp Val Val Ile Ala Lys Thr Ser Met Thr Thr  
           35                          40                          45  
 Ile Gln Leu Gln Pro Lys Gln Val Ile Asn Met Met Thr Gln Leu Gln  
           50                          55                          60  
 Asp Ala Ser Ile Ile Phe Lys Gln Thr Asp Cys Leu His Asn Ala Ala  
 65                          70                          75                          80  
 Ile Ser Asp Val Lys Asp Phe Leu Asn Ile Thr Thr Ile Ser Tyr Val  
                           85                          90                          95  
 Ile Thr Leu Leu Ile Asn Tyr Thr Val Ile Ile Phe Asn Asp Ile Tyr  
                           100                          105                          110  
 Arg

<210> 6456  
 <211> 70  
 <212> PRT  
 <213> S.epidermidis

<400> 6456  
 Cys Lys Arg Phe Phe Glu His His His Asp Ile Val Arg His Asn Thr  
 1                          5                          10                          15  
 Leu Asp Lys Leu Tyr Gly Tyr Tyr Ile Gln Arg His Ile Pro Val Arg  
                           20                          25                          30  
 Asp Lys Ile Leu Ile Phe Ser Gly Arg Ile Ser Leu Glu Ile Leu Ile  
                           35                          40                          45  
 Lys Ala Ala Lys Ile Asp Val Gly Ile Ile Phe Ser Lys Ser Ser Leu  
                           50                          55                          60  
 Leu His Phe Asn Thr Thr  
 65                          70

<210> 6457  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

<400> 6457  
 Thr Arg Ile Ser Arg Ile Phe Lys Phe Trp Phe Ala Lys Gln Leu Met  
 1                          5                          10                          15  
 Lys Leu Arg Gln Pro Ile Asn Leu Tyr Ser Tyr Ser Ser His Met Ile  
                           20                          25                          30  
 Phe Ile Val Leu Ile Tyr Tyr Ser  
                           35                          40

<210> 6458  
 <211> 41  
 <212> PRT  
 <213> S.epidermidis

<400> 6458  
 Asn Leu Pro Ser Glu Asp Asn Arg Ala Arg Val His Val Glu Gln Asn  
 1                          5                          10                          15  
 Asp Ser Asp Thr Leu Val Ile Arg Pro Asn Cys Ala Ser Leu Ser Leu  
                           20                          25                          30  
 Cys Arg Lys Tyr Leu Ala Thr Ser Pro  
                           35                          40

<210> 6459  
 <211> 47  
 <212> PRT  
 <213> S.epidermidis

<400> 6459  
 Phe Leu Ile Pro Ala Asn Asn Ile Ile His Val Ala Lys Ile Asn Gly  
 1 5 10 15  
 His Val Lys Val Gly Lys Pro Ser Gly Ala Ser Asn Val Leu Lys Pro  
 20 25 30  
 Lys Cys Met Asn Ala Val Ser Thr Ile Pro Lys Ile Ile Ala Arg  
 35 40 45

<210> 6460  
 <211> 41  
 <212> PRT  
 <213> S.epidermidis

<400> 6460  
 Ser Asn Val Pro Ile Thr Lys Ala Leu Ile Leu Glu Ile Ser Ile Asp  
 1 5 10 15  
 Gly Thr Val Glu Ile Leu Asn Ile Lys His Lys Ile Met Ile Ile Ser  
 20 25 30  
 Gly Ile His Thr Gln Lys Phe Lys Leu  
 35 40

<210> 6461  
 <211> 93  
 <212> PRT  
 <213> S.epidermidis

<400> 6461  
 Leu Val Met Leu Leu Asn Ile Ile Glu Gly Val Thr His Ile Asn Pro  
 1 5 10 15  
 Lys Val Leu Lys Ala Leu Ala Ile Thr Ser Asn Val Leu Leu Val Ile  
 20 25 30  
 Gly Ile Ile Cys Leu Ile Met Leu Lys Leu Met Leu Ala Ile Ala Phe  
 35 40 45  
 Phe Val Val Ser Leu Thr Ile Ser Leu Val Ile Phe Asn Val Met Phe  
 50 55 60  
 Arg His Arg Thr Gly Met Lys Ile Ala Ile Asn Val Ser Phe Phe Ile  
 65 70 75 80  
 Val Met Ile Ala Ile Val Ile Ala Tyr Phe Val Leu Ser  
 85 90

<210> 6462  
 <211> 59  
 <212> PRT  
 <213> S.epidermidis

<400> 6462  
 Leu His Tyr Pro Lys Thr Gly Leu Val Lys Val Leu Ser Lys Asn Leu  
 1 5 10 15  
 Gln Phe Ala Leu Ile Thr His Ser Pro Lys Asn Lys Ile Lys Cys Pro  
 20 25 30  
 Asn Tyr Thr Arg Asn His Ser Ile Val Ile Lys Lys Ile Ser Lys Lys

6459-6462 = S.epidermidis



130

135

<210> 6465  
 <211> 92  
 <212> PRT  
 <213> S.epidermidis

<400> 6465  
 Pro Ser His Thr Phe Tyr Leu Pro Ser Phe Val Ala Ser Val Val Ser  
 1 5 10 15  
 Phe Asn Pro Ile Ile Pro Lys Ile Arg Val Ile Ile Lys Asn Ile Leu  
 20 25 30  
 Val Lys Val Asn Gly Trp Leu Lys Ile Ile Ser Thr Asn Thr Val  
 35 40 45  
 Pro Thr Ala Pro Ile Pro Thr Lys Asn Ala Tyr Thr Val Pro Thr Gly  
 50 55 60  
 Lys Cys Phe Glu Ala Ser Met Thr Arg Lys Lys Leu Lys Ala Ile Lys  
 65 70 75 80  
 Lys Arg Val Asn Ile His Val Asn Asn Glu Cys Ala  
 85 90

<210> 6466  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

<400> 6466  
 Ile Ile Trp Leu Tyr Ser Thr Val Val Ile Asn Lys Ile Leu Ser Val  
 1 5 10 15  
 Ile Tyr Asn Ser Lys Val Asn Gly Lys Ile Ser Phe Tyr Asn Ala Val  
 20 25 30  
 Leu Val Asn Ile Leu Ile Ile Thr  
 35 40

<210> 6467  
 <211> 45  
 <212> PRT  
 <213> S.epidermidis

<400> 6467  
 Ile Ile Ile Thr Phe Lys Gln Trp Ile His Ser Thr Asn Leu Thr Lys  
 1 5 10 15  
 Pro Gly Asp Lys Thr Thr Ile Asn Ile Leu Val Gly Phe Leu Arg Asp  
 20 25 30  
 Asp Asp Ile Asn Arg Ser Met Ile Tyr Val Lys Ser Ala  
 35 40 45

<210> 6468  
 <211> 145  
 <212> PRT  
 <213> S.epidermidis

<400> 6468  
 Gln Ser Ile Thr Gln Ser Phe Lys Glu Ala Ile Ser Met Ile Pro Gly  
 1 5 10 15  
 Glu Ile Ile Val Lys Asn Thr Glu Ile Glu Val Asn Lys His His Pro

64667:64668

20 25 30  
 Glu Thr Val Ile Glu Val Lys Asn Thr Gly Asp Arg Pro Ile Gln Val  
 35 40 45  
 Gly Ser His Phe His Phe Phe Glu Ala Asn Lys Ala Leu Glu Phe Asp  
 50 55 60  
 Arg Glu Lys Ala Tyr Gly Lys His Leu Asp Ile Pro Ala Gly Ala Ala  
 65 70 75 80  
 Val Arg Phe Glu Pro Gly Asp Glu Lys Lys Val Gln Leu Val Glu Tyr  
 85 90 95  
 Ser Gly Arg Arg Lys Ile Tyr Gly Phe Arg Gly Leu Val Asp Gly Asp  
 100 105 110  
 Ile Asp Glu Glu Arg Val Phe Arg Pro Asn Asp Ser Asn Gln Asn Ala  
 115 120 125  
 Ala Val Lys Asn Asp Ala Gly Glu Asp Asn Ala Asn Lys Lys Gly Gly  
 130 135 140  
 Lys  
 145

<210> 6469  
 <211> 49  
 <212> PRT  
 <213> S.epidermidis

<400> 6469  
 Tyr Cys Tyr Thr Ile Ser Phe Asn Pro Ile Tyr Leu Cys Asn Met Asn  
 1 5 10 15  
 Arg Asn Asp Thr His Ser Ile Phe Lys Val Phe Asp Phe Glu Gln His  
 20 25 30  
 Lys Tyr Cys Tyr Met Asn Val Lys Leu Leu Lys Ile His Phe Asp Asn  
 35 40 45  
 Asn

<210> 6470  
 <211> 58  
 <212> PRT  
 <213> S.epidermidis

<400> 6470  
 Thr Asn Leu Thr Arg Cys Leu Met Tyr Lys Asp Tyr Asn Met Thr Gln  
 1 5 10 15  
 His Thr Leu Leu Met Glu Thr Ser Val Leu Ile Pro Thr Asn Asp Ile  
 20 25 30  
 Ser Arg His Val Asn Asp Ile Ala Glu Thr Ile Pro Asp Thr Glu Phe  
 35 40 45  
 Asp Glu Phe Arg Tyr His Arg Gly Leu Ile  
 50 55

<210> 6471  
 <211> 62  
 <212> PRT  
 <213> S.epidermidis

<400> 6471  
 Thr Lys Leu Thr Arg Cys Leu Met Tyr Arg Asp Tyr Asn Lys Thr Gln  
 1 5 10 15

Leu Thr Leu Pro Met Glu Thr Ser Val Leu Ile Pro Thr Asn Asp Ile  
                   20                  25                  30  
 Thr Arg Tyr Val His Asn Ile Val Glu Thr Ile Leu Glu Thr Glu Phe  
                   35                  40                  45  
 Arg His His Arg Asp Ser Thr Ser Tyr His Pro Lys Met Met  
           50                  55                  60

<210> 6472

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6472

Asp Cys Val Thr Ile Leu Ala Lys Asn Tyr Lys Ser Ile Thr Leu His  
 1                  5                  10                  15  
 Thr Asn Ile Asn Phe Ser Val Arg Val Trp Leu Val Val Lys Gln Glu  
                   20                  25                  30  
 Arg Ile Lys Ile Tyr Phe Val Thr His  
           35                  40

<210> 6473

<211> 221

<212> PRT

<213> S.epidermidis

<400> 6473

Tyr Ser Pro Thr Arg Arg Tyr Asn Cys Ala His Ser Thr Gly Gln Trp  
 1                  5                  10                  15  
 Gly Leu Ile Lys Met Lys Ala Ile Ile Leu Ala Gly Gly Glu Ser Ser  
                   20                  25                  30  
 Arg Phe Gly Lys Ala Lys Ala Phe Ala Lys Ile Asp Asn Gln Tyr Phe  
           35                  40                  45  
 Tyr Gln Lys Ile Ile Glu Thr Leu Lys Ser Thr Asn Met Phe Asn Arg  
           50                  55                  60  
 Ile Ile Ile Ser Thr Asn Ser Gln Leu Ala Ser Gln Phe Glu Tyr Glu  
 65                  70                  75                  80  
 Tyr Val Ile Ile Asp Asp Glu His His Gln Asn Lys Gly Pro Leu Thr  
                   85                  90                  95  
 Gly Ile Tyr Ser Val Met Lys Gln Tyr Met Asp Glu Glu Leu Phe Phe  
           100                  105                  110  
 Ile Val Ser Val Asp Thr Pro Met Ile Thr Ser Lys Ala Val Asn Gly  
           115                  120                  125  
 Leu Tyr His Phe Met Val Ser Asn Leu Ile Glu Ser Arg Leu Asp Ile  
           130                  135                  140  
 Val Ala Phe Lys Glu Gly Glu Ile Cys Ile Pro Thr Ile Gly Phe Tyr  
 145                  150                  155                  160  
 Thr Leu Ser Thr Phe Pro Phe Ile Glu Lys Ala Leu Asn Ser Asn His  
                   165                  170                  175  
 Leu Ser Leu Lys His Val Ile Lys Gln Leu Ser Thr Asp Trp Leu Asp  
           180                  185                  190  
 Val Thr Glu Ile Asp Ser Pro His Tyr Trp Tyr Lys Asn Ile Asn Phe  
           195                  200                  205  
 Gln His Asp Leu Asp Ser Leu Lys Lys Gln Ile Asn Glu  
           210                  215                  220

<210> 6474

<211> 180  
 <212> PRT  
 <213> S.epidermidis

<400> 6474

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Leu | Pro | Thr | Val | Pro | Arg | Pro | Ser | Phe | Cys | Ser | Leu | Phe | Leu | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Pro | Phe | Leu | Lys | Asn | Val | Ala | Pro | Lys | Glu | Gly | Thr | Arg | Val | Ile | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Ser | Ser | Glu | Ala | Asn | Lys | Leu | Lys | Val | Met | Ala | Ser | Ala | Asn | Gly |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Leu | Asn | Ile | Ser | Pro | Thr | Glu | Pro | Asp | Thr | Asn | Thr | Ser | Gly | Lys | Asn |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Thr | Ile | Val | Thr | Arg | Val | Asp | Asp | Ile | Ile | Gly | Leu | Asn | Thr | Ser |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Leu | Val | Ala | Leu | Ile | Ile | Lys | Phe | Ser | Pro | Leu | Ser | Phe | Ser | Phe | Gly |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Asp | Asn | Leu | Leu | Asn | Ile | Phe | Ser | Thr | Thr | Thr | Ile | Glu | Ser | Ser |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ile | Thr | Arg | Pro | Ile | Ala | Thr | Val | Asn | Ala | Pro | Lys | Val | Arg | Ile | Phe |
|     |     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asn | Asp | Thr | Leu | Leu | Asn | Phe | Asn | Ala | Met | Ser | Ala | Ile | Asn | Ile | Asp |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ile | Gly | Ile | Asp | Thr | Ile | Glu | Ile | Ala | Val | Val | Leu | Ile | Phe | Leu | Lys |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Asn | Arg | Arg | Ile | Thr | Ile | Ile | Ala | Thr | Ile | Val | Pro | Arg | Ala | Ala | Phe |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ser | Thr | Ile | Val |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 180 |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6475  
 <211> 41  
 <212> PRT  
 <213> S.epidermidis

<400> 6475

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Gln | Asn | Ala | Phe | Ile | His | Leu | Phe | Leu | Asn | Gln | Asn | Ile | Tyr | Asn |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Glu | Ile | Asp | Val | Ile | Lys | Asn | Ile | Asn | Pro | Asn | Asn | Ile | Ser | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Lys | Ser | Ser | Tyr | Phe | Phe | Lys | Phe |     |     |     |     |     |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |

<210> 6476  
 <211> 51  
 <212> PRT  
 <213> S.epidermidis

<400> 6476

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Asp | Thr | Ala | Ser | Leu | Asn | Val | Cys | Leu | Thr | Ser | Phe | Leu | Lys | Arg |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Val | Ser | Asn | Ile | Arg | Lys | Ser | Ile | Ala | Lys | Met | Thr | Ser | Met | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Met | Asn | Asn | Val | Val | Ile | Arg | Ser | Arg | Val | Phe | Phe | Asn | Ile | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Asn | Ser |     |     |     |     |     |     |     |     |     |     |     |     |     |



50

<210> 6477  
 <211> 87  
 <212> PRT  
 <213> S.epidermidis

<400> 6477  
 Arg Gly Phe Tyr Met Arg Lys Phe Ile Leu Leu Leu Phe Ile Ile Leu  
 1 5 10 15  
 Asn Leu Val Ala Ile Ile Ile Thr Ile Asn His Pro Leu Thr Ile Ser  
 20 25 30  
 Tyr Phe Ser Leu Arg Val Ile Phe Val Ala Phe Ile Phe Ile Ile Ser  
 35 40 45  
 Ile Phe Phe Ile Phe Leu Arg Thr Thr Asn Tyr Glu Leu Ile Leu Ser  
 50 55 60  
 Ile Leu Ser Thr Val Phe Ala Phe Ile His Ile Gly Leu Ile Ile His  
 65 70 75 80  
 Ser Ala Tyr Leu Tyr Leu Tyr  
 85

<210> 6478  
 <211> 41  
 <212> PRT  
 <213> S.epidermidis

<400> 6478  
 Cys Ile Asn Tyr Leu Val Lys Tyr Lys Gly Val Asn Lys His Ala Gln  
 1 5 10 15  
 Thr Ser Thr Ser Glu Tyr Ser Phe Lys Gln Thr Asp Ser Cys Ser Asn  
 20 25 30  
 Phe Asp Cys Ile Gly Tyr Glu Arg Leu  
 35 40

<210> 6479  
 <211> 41  
 <212> PRT  
 <213> S.epidermidis

<400> 6479  
 Arg Tyr Ile Tyr Ser Asp Val Leu Thr Asn Ile Ala Gln Leu Val Phe  
 1 5 10 15  
 Leu Leu Glu Glu Leu Asp Val Glu Asn Leu Ser Glu Leu Leu Ser Arg  
 20 25 30  
 Leu Asn Ser Gly Tyr Ile Leu Gln Ile  
 35 40

<210> 6480  
 <211> 50  
 <212> PRT  
 <213> S.epidermidis

<400> 6480  
 Leu Cys His Leu Lys Asn Ser Val Lys Arg Ile Arg Arg Val Leu Ser  
 1 5 10 15  
 Cys Ile Tyr Phe Ala Thr Lys Gln Ile His Asp Met Tyr Leu Lys Asp

6477 = 6478 = 6479 = 6480

20 25 30  
 Ile Asn Lys Leu Glu Thr Pro Tyr Asp Thr Ile Ala Thr Ile His Ile  
 35 40 45  
 Val Ser  
 50

<210> 6481  
 <211> 122  
 <212> PRT  
 <213> S.epidermidis

<400> 6481  
 Arg Ser Ala His Met Asn Lys Ala Leu Val Ile Arg Ala Ile Lys Phe  
 1 5 10 15  
 Ser Leu Ile Phe Met Thr Ala Phe Leu Ile Leu Asn Leu Leu Thr Met  
 20 25 30  
 Lys Glu Ala Ser Ile Ser Ser Ile Ile Val Arg Thr Val Ile Ala Ala  
 35 40 45  
 Ile Val Phe Phe Val Ile Tyr Ile Ile Val Phe Thr Ile Leu Ser Ser  
 50 55 60  
 Ser Glu Arg Lys Ile Ile Tyr Gly Thr Thr Leu Pro Ile Ala Leu Phe  
 65 70 75 80  
 Ile Cys Leu Ile Phe Gly Ala Ile Phe Phe Thr Pro Arg Ile Gly Ile  
 85 90 95  
 Ile Ala Gly Leu Ile Ile Gly Val Phe Ala Gly Val Ile Trp Glu Phe  
 100 105 110  
 Leu Asn Arg Lys Asn Gly Gly Arg Ser Ser  
 115 120

<210> 6482  
 <211> 69  
 <212> PRT  
 <213> S.epidermidis

<400> 6482  
 Cys Gly Tyr His Lys Ile Lys Ser Leu Leu Ile Lys Arg Leu Ile Asp  
 1 5 10 15  
 Ser Lys Pro Asn Lys Lys Ile Met Arg Asn Tyr Ser Trp Glu Tyr Phe  
 20 25 30  
 Asn Ala Gln Ile Lys Lys Ser Phe Gln Asn Gln Asn Lys Thr Ile Tyr  
 35 40 45  
 Ser Gln Ser Lys Ile Asp Val Glu Pro Asp Phe Gly Phe Ser Leu Val  
 50 55 60  
 Cys Pro Phe Glu Gly  
 65

<210> 6483  
 <211> 119  
 <212> PRT  
 <213> S.epidermidis

<400> 6483  
 Leu Phe Asn His Met Gly Gly Phe Met Asn Tyr Leu Glu Ile Ser Leu  
 1 5 10 15  
 His Ile Glu Gln Gln Leu Val Lys Leu Leu Ser Leu Ser Glu Asn Ala  
 20 25 30

6481 6482 6483

Lys Tyr Tyr Ala Leu Ile His His Asn Lys Phe Glu Ser Phe Ile Asp  
                   35                                  40                                  45  
 Asp Phe Asn Leu Thr Val Asn Gln Glu Met Lys Trp Ala Met Ser His  
                   50                                  55                                  60  
 Gln Leu Leu Leu Asn Ser Asn Asp Thr Leu Leu Ser Tyr Cys Gln Leu  
 65                                  70                                  75                                  80  
 Ile Arg Arg Leu Asn Asp Ser Pro Leu Leu Thr Leu Asn Gln Gly His  
                                   85                                  90                                  95  
 Ile Ile Tyr Tyr Ile Asn Thr Gln Gln Thr Leu Ile His Arg Gln Leu  
                                   100                                  105                                  110  
 Leu Lys His Lys Gln Ala Leu  
                                   115

<210> 6484

<211> 296

<212> PRT

<213> S.epidermidis

<400> 6484

Gln Met Asn His Leu Thr Thr Glu Thr Arg Asn Ile Gln Thr Met His  
 1                                  5                                  10                                  15  
 Leu Asp Glu Met Asn Leu Ser Asp Ala Leu Lys Thr Met Asn Gln Glu  
                                   20                                  25                                  30  
 Asp Gln Leu Val Pro Lys Ala Ile Glu Pro Val Ile Pro Asn Leu Thr  
                                   35                                  40                                  45  
 Lys Val Ile Glu Ser Ala Ile Gln Arg Phe Asn Asn Gly Gly Arg Ile  
 50                                  55                                  60  
 Ile Tyr Ile Gly Ala Gly Thr Ser Gly Arg Leu Gly Val Leu Asp Ala  
 65                                  70                                  75                                  80  
 Ala Glu Cys Val Pro Thr Phe Asn Val Ser Pro Asn Asp Ile Ile Gly  
                                   85                                  90                                  95  
 Ile Ile Ala Gly Gly Gln Lys Ala Met Thr Val Ala Ile Glu Gly Ala  
                                   100                                  105                                  110  
 Glu Asp Asp Ala Glu Gln Gly Ala Gln Asp Leu Lys Asn Ile His Leu  
                                   115                                  120                                  125  
 Gln Ser Lys Asp Ile Val Val Gly Ile Ser Ala Ser Gly Arg Thr Pro  
                                   130                                  135                                  140  
 Tyr Val Lys Gly Ala Leu Val Tyr Ala Asn Lys Met Asn Ala Glu Thr  
 145                                  150                                  155                                  160  
 Val Ala Leu Ser Cys Asn Val His Ser Asp Ile Ser Lys Asn Ser Asn  
                                   165                                  170                                  175  
 His Val Leu Glu Ile Asn Val Gly Pro Glu Val Leu Thr Gly Ser Thr  
                                   180                                  185                                  190  
 Arg Leu Lys Ser Gly Thr Ala Gln Lys Leu Val Leu Asn Met Ile Ser  
                                   195                                  200                                  205  
 Thr Met Thr Met Ile Gly Val Gly Lys Val Tyr Asp Asn Leu Met Val  
                                   210                                  215                                  220  
 Asp Leu Arg Pro Thr Asn Gln Lys Leu Ile His Arg Ser Ile Arg Ile  
 225                                  230                                  235                                  240  
 Ile Gln Asp Val Cys Asp Leu Asn His Gln Glu Ala Ile Glu Leu Tyr  
                                   245                                  250                                  255  
 Glu Lys Ser Asp His Asn Ile Lys Ile Ala Ile Val Met His Leu Cys  
                                   260                                  265                                  270  
 Ser Thr Thr Gln Gln Asp Ala Arg Leu Arg Leu Lys Gln Asn Asn Gly  
                                   275                                  280                                  285  
 Val Ile Lys Gln Ala Ile Asn Thr

290

295

<210> 6485  
 <211> 213  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6485

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Trp | Gly | Gln | Val | Met | Glu | Asn | Asn | Glu | Leu | Gln | Arg | Gly | Leu | Asn |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Arg | Gln | Met | Gln | Met | Ile | Ala | Leu | Gly | Gly | Thr | Ile | Gly | Val | Gly |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Leu | Phe | Met | Gly | Ala | Thr | Ser | Thr | Ile | Lys | Trp | Thr | Gly | Pro | Ser | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Leu | Ala | Tyr | Leu | Ile | Ala | Gly | Ile | Phe | Leu | Phe | Leu | Ile | Met | Arg |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Met | Gly | Glu | Met | Ile | Tyr | Ile | Asn | Pro | Thr | Thr | Gly | Ser | Phe | Ala |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Thr | Phe | Ala | Ser | Asp | Tyr | Ile | His | Pro | Ala | Ala | Gly | Tyr | Met | Thr | Ala |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Trp | Ser | Asn | Val | Phe | Gln | Trp | Val | Val | Val | Gly | Met | Ser | Glu | Val | Ile |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Val | Gly | Glu | Tyr | Met | Asn | Tyr | Trp | Phe | Pro | Ser | Leu | Pro | Asn | Trp |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ile | Pro | Gly | Val | Ile | Ala | Val | Leu | Phe | Leu | Met | Ala | Ala | Asn | Leu | Val |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ser | Val | Lys | Ala | Phe | Gly | Glu | Phe | Glu | Phe | Trp | Phe | Ala | Leu | Ile | Lys |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Val | Val | Thr | Ile | Val | Leu | Met | Ile | Ile | Ala | Gly | Leu | Arg | Leu | Ile | Leu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Phe | Gly | Ile | Gly | Asn | Gly | Gly | Asn | Pro | Ile | Gly | Ile | Ser | Asn | Leu | Trp |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ser | His | Gly | Gly | Phe | Met | Pro | Asn | Gly | Phe | Ile | Gly | Phe | Phe | Phe | Ala |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Leu | Ser | Ile | Val | Ile |     |     |     |     |     |     |     |     |     |     |     |
|     |     | 210 |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6486  
 <211> 288  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6486

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ala | Arg | Arg | Leu | Thr | Glu | Arg | Val | Asn | Leu | Met | Ala | Glu | Gln | Arg | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Thr | Gly | Gln | Leu | Asp | Leu | Thr | Val | Phe | Asn | Asn | Gly | Gln | Ser | Ser | Lys |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Arg | Asn | Ile | Phe | Phe | Glu | Lys | Ala | Leu | Lys | Val | Leu | Arg | Pro | Ile |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr | Leu | Glu | Gln | Ser | Pro | Val | Pro | Thr | Phe | Tyr | Ile | Val | Asn | Val | Gly |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Gly | Tyr | Leu | Asp | Gly | Asp | Arg | Tyr | Arg | Val | Asn | Val | Asn | Leu | Glu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Asp | Asn | Ala | Gln | Val | Thr | Leu | Thr | Ser | Gln | Gly | Ala | Thr | Lys | Ile | Tyr |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Lys | Thr | Pro | Asn | Asp | His | Val | Glu | Gln | Tyr | Gln | Thr | Phe | Asn | Leu | Ser |

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Gln | Ser | Tyr | Met | Glu | Phe | Val | Ala | Asp | Pro | Ile | Ile | Ala | Tyr | Glu |
|     |     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |
| Asn | Ala | Lys | Phe | Phe | Gln | His | Asn | Thr | Phe | Asn | Leu | Lys | Glu | Asp | Ser |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ala | Met | Phe | Tyr | Thr | Asp | Ile | Leu | Thr | Pro | Gly | Tyr | Ser | Ser | Asn | Gly |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gln | Asp | Phe | Thr | Tyr | Asn | Tyr | Met | His | Leu | Ile | Asn | Glu | Ile | Tyr | Ile |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Asp | Asn | Gln | Leu | Val | Val | Phe | Asp | Asn | Met | Met | Leu | Ser | Pro | Asp | Lys |
|     |     | 180 |     |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ser | Arg | Leu | Asp | Gly | Ile | Gly | Tyr | Met | Glu | Asn | Tyr | Thr | His | Leu | Gly |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ser | Ala | Tyr | Phe | Ile | His | Pro | Asp | Val | Asn | Gln | Ser | Phe | Ile | Glu | Asp |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ile | Tyr | Thr | Ala | Val | Ala | Asp | Phe | Gln | Lys | Gln | Tyr | Asp | Cys | Arg | Ile |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Gly | Ile | Thr | Gln | Leu | Pro | Thr | His | Gly | Leu | Ala | Val | Arg | Ile | Leu | Thr |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Lys | Arg | Thr | Gln | Ile | Ile | Glu | Glu | Ile | Leu | Thr | Arg | Val | Gln | Ser | Tyr |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Ile | Asn | Gln | Thr | Ile | Tyr | His | Arg | Gln | Ile | Asn | Phe | Leu | Arg | Lys | Tyr |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |

&lt;210&gt; 6487

&lt;211&gt; 128

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6487

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Leu | Leu | Gln | Gln | Asp | Val | His | Gln | Arg | Ser | Gly | Phe | Ile | Met | Gly |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys | Ile | Lys | Asp | Ile | Asn | Asp | Leu | Val | Asn | Ala | Thr | Phe | Gln | Val | Lys |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Phe | Phe | Arg | Asp | Thr | Lys | Lys | Gln | Tyr | Asn | Leu | Asn | Tyr | Glu | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Tyr | Ile | Leu | Asn | His | Ile | Leu | Lys | Ser | Glu | Ser | Asn | Glu | Ile | Ser |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Lys | Glu | Ile | Ala | Thr | Cys | Ser | Glu | Phe | Lys | Pro | Tyr | Tyr | Leu | Thr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Lys | Ala | Leu | Gln | Lys | Leu | Lys | Asp | Leu | Asn | Leu | Leu | Ser | Lys | Lys | Arg |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Val | His | Asp | Glu | Arg | Thr | Val | Ile | Val | Phe | Val | Ser | Asp | Glu | Gln |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg | Glu | Lys | Ile | Lys | Lys | Leu | Ile | Leu | Glu | Leu | Glu | Asn | Tyr | Ile | Lys |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |

&lt;210&gt; 6488

&lt;211&gt; 55

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6488

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Ser | Lys | His | Val | Asn | Asn | Phe | Leu | Asn | Gln | Phe | Ala | Val | His | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Asn | Ile | Thr | Ile | Phe | Gly | Gly | Val | Lys | Tyr | Tyr | Glu | Lys | Asn | Gln |



Thr Pro Pro Asn Ile Ile Lys Thr Thr Ile Lys Lys Ile Ala Asn Leu  
 1 5 10 15  
 Leu Pro Asn Glu Asn Cys Asn Asn Phe Leu Ile Ile His Phe Phe Leu  
 20 25 30  
 Ser Tyr Lys Lys Ser Glu Arg Ser Gln Phe Ile Tyr Arg Ser Val Gln  
 35 40 45  
 Ile

<210> 6492

<211> 324

<212> PRT

<213> S.epidermidis

<400> 6492

Val Ile His Lys Lys Thr Leu Gly Val Ser Thr Met Thr Lys Val Tyr  
 1 5 10 15  
 Phe Asn His Asp Gly Gly Val Asp Asp Leu Val Ser Leu Phe Leu Leu  
 20 25 30  
 Leu Gln Met Glu Asn Ile Glu Leu Val Gly Val Ser Thr Ile Gly Ala  
 35 40 45  
 Asp Cys Tyr Leu Glu Pro Ser Leu Ser Ala Ser Leu Lys Ile Ile Asn  
 50 55 60  
 Arg Phe Ser Asp Val Glu Ile Asn Val Ala Pro Ser Tyr Glu Arg Gly  
 65 70 75 80  
 Lys Asn Pro Phe Pro Lys Glu Trp Arg Met His Ala Phe Phe Met Asp  
 85 90 95  
 Ala Leu Pro Val Leu Asn Glu Ser Cys Ile Pro Lys Arg Cys Lys Ala  
 100 105 110  
 Ser Glu Asp Glu Ala Tyr Ile Asp Ile Ile Arg Lys Val Lys Ser Cys  
 115 120 125  
 Asp Glu Lys Val Thr Leu Leu Phe Thr Gly Pro Leu Thr Asp Leu Ala  
 130 135 140  
 Lys Ala Ile Lys Tyr Asp Asn Ser Ile Leu Lys Asn Ile Glu Lys Leu  
 145 150 155 160  
 Val Trp Met Gly Gly Thr Phe Leu Asp Lys Gly Asn Val Glu Glu Pro  
 165 170 175  
 Glu His Asp Gly Thr Ala Glu Trp Asn Ala Phe Trp Asp Pro Glu Ala  
 180 185 190  
 Val Lys Val Val Leu Asp Ser Asp Met Ile Val Asp Ile Val Ala Leu  
 195 200 205  
 Glu Ser Thr Asn Gln Val Pro Leu Thr Met Glu Val Arg Gln Met Trp  
 210 215 220  
 Ala Asp Lys Arg Gln Tyr Leu Gly Val Asp Phe Leu Gly Thr Ser Tyr  
 225 230 235 240  
 Ala Ala Val Pro Pro Leu Thr His Phe Val Thr Asn Ser Thr Tyr Phe  
 245 250 255  
 Leu Trp Asp Val Leu Thr Thr Ala Tyr Val Gly Ser Pro Asn Leu Val  
 260 265 270  
 Glu Ser Thr Lys Leu Lys Ile Asp Val Val Ser Gln Gly Pro Ser Gln  
 275 280 285  
 Gly Arg Thr Phe Gln Ser Glu Asn Gly Arg Glu Val Gln Val Ile Thr  
 290 295 300  
 Asp Val Asn Lys Gln Ala Phe Phe Lys Tyr Ile Thr Asp Leu Ala Lys  
 305 310 315 320  
 Lys Ile Glu Thr

<210> 6493  
 <211> 368  
 <212> PRT  
 <213> S.epidermidis

<400> 6493

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Lys | His | Lys | Asn | Leu | Val | Lys | Arg | Gly | Lys | Lys | Met | Lys | Ile | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Val | Gly | Ser | Gly | Asn | Gly | Ala | Val | Thr | Ala | Ala | Val | Asp | Met | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Lys | Gly | His | Asp | Val | Arg | Leu | Tyr | Cys | Arg | Asn | Glu | Ser | Ile | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Lys | Phe | Asp | Val | Ala | Leu | Glu | Lys | Gly | Gly | Phe | Asp | Phe | Tyr | Asn | Glu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Glu | Glu | Lys | Phe | Ile | Glu | Phe | Thr | Asp | Ile | Ser | Asp | Asp | Met | Glu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Tyr | Val | Leu | Asp | Gly | Ala | Asp | Ile | Val | Gln | Val | Ile | Ile | Pro | Ser | Ser |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Phe | Ile | Glu | Tyr | Tyr | Ala | Lys | Val | Met | Ser | Lys | Phe | Val | Thr | Asn | Asp |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| His | Leu | Ile | Phe | Phe | Asn | Ile | Ala | Ala | Ser | Met | Gly | Ser | Ile | Arg | Phe |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Met | Asn | Val | Leu | Glu | Asp | Arg | His | Ile | Asp | Val | His | Pro | His | Phe | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Glu | Ala | Asn | Thr | Leu | Thr | Tyr | Gly | Thr | Arg | Val | Asp | Phe | Asn | Asn | Ala |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Lys | Val | Asp | Leu | Ser | Leu | Asn | Val | Arg | Arg | Val | Phe | Phe | Ser | Thr | Phe |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Asp | Arg | Ser | Glu | Leu | Asn | Glu | Ser | Tyr | Glu | Lys | Val | Ser | Lys | Ile | Tyr |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Asp | Tyr | Leu | Val | Lys | Glu | Glu | Ser | Leu | Leu | Lys | Thr | Asn | Leu | Glu | Asn |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Gly | Asn | Pro | Glu | Val | His | Pro | Gly | Pro | Thr | Leu | Leu | Asn | Val | Gly | Arg |
|     | 210 |     |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |
| Ile | Asp | Tyr | Ser | Glu | Glu | Phe | Ser | Leu | Tyr | Lys | Glu | Gly | Ile | Thr | Lys |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| His | Thr | Val | Arg | Leu | Leu | His | Ala | Ile | Glu | Ile | Glu | Arg | Leu | Asn | Leu |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Gly | Arg | Lys | Leu | Gly | Phe | Glu | Leu | Ser | Thr | Ala | Lys | Glu | Ser | Arg | Ile |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Gln | Arg | Gly | Tyr | Leu | Glu | Arg | Lys | Asp | Glu | Asp | Glu | Pro | Leu | Asn | Arg |
|     | 275 |     |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Leu | Phe | Asn | Thr | Ser | Pro | Val | Phe | Ser | Gln | Ile | Pro | Gly | Pro | Asn | His |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Val | Glu | Asn | Arg | Tyr | Leu | Thr | Glu | Asp | Ile | Ala | Tyr | Gly | Leu | Val | Leu |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Trp | Ser | Ser | Leu | Gly | Arg | Val | Ile | Asp | Val | Pro | Thr | Pro | Asn | Ile | Asp |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Ala | Val | Ile | Met | Ile | Ala | Ser | Thr | Ile | Leu | Glu | Arg | Asp | Phe | Phe | Glu |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Glu | Gly | Leu | Thr | Ile | Glu | Glu | Leu | Gly | Leu | Asp | Lys | Leu | Gly | Leu | Glu |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |

<210> 6494



<211> 263  
 <212> PRT  
 <213> S.epidermidis

<400> 6494

```

Leu Ile Asn Asn Asn Glu Val Asp Glu Ala Met Phe Met Ser Lys Ile
1           5           10           15
Thr Phe Lys Asp Ile Tyr Ile Asp Gly Asn Lys Ile Thr Glu Asp Thr
          20           25           30
Arg Lys Val Ile Tyr Leu Leu Pro Ser Gln Pro Leu Lys Tyr Ala Ser
          35           40           45
Asn Thr Trp Ile Tyr Lys Thr Met Pro Thr Met Asn Gln Trp Leu Lys
          50           55           60
Asp Ile Glu Val Gln Lys Lys Met His Leu Asn Gln Ser Ser Tyr His
65           70           75           80
Leu Ser Phe Ser Phe Pro Ala Asn Glu Lys Ile Asp Glu Val Leu Leu
          85           90           95
Glu Lys Ile Arg Glu Leu Gly Phe Gln Ile Gly Val Leu Glu Leu Tyr
          100          105          110
Val Ile Glu Ala Lys Ala Leu Lys Glu Leu Ser Arg Lys Arg Asp Val
          115          120          125
Asp Ile Gln Leu Val Ser Ser Asn Asn Ile Asn Asp Tyr Leu His Val
130          135          140
Tyr Asp Val Phe Ala Arg Pro Phe Gly Asp Ser Tyr Ala Asn Met Val
145          150          155          160
Lys Gln His Ile Tyr Ser Ser Tyr Asn Leu Asp Asp Ile Glu Arg Leu
          165          170          175
Val Ala Tyr Val Asn Gln Gln Pro Val Gly Ile Val Asp Thr Ile Met
          180          185          190
Thr Asp Lys Thr Ile Glu Ile Asp Gly Phe Gly Val Leu Glu Glu Phe
          195          200          205
Gln His Gln Gly Ile Gly Ser Glu Ile Gln Ala Tyr Val Gly His Met
210          215          220
Ala Asn Glu Arg Pro Val Ile Leu Val Ala Asp Gly Glu Asp Thr Ala
225          230          235          240
Lys Asp Met Tyr Leu Arg Gln Gly Tyr Val Tyr Gln Gly Phe Lys Tyr
          245          250          255
His Ile Leu Lys Glu Asn Ile
          260

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<210> 6495  
 <211> 405  
 <212> PRT  
 <213> S.epidermidis

<400> 6495

```

Ser Asn Asp Lys Gly Gly Ala Val Met Asn Gln Ser Thr Ile Ile Lys
1           5           10           15
Asp Pro Ile Phe Thr Lys Ser Phe Asn Ile Asn Phe Ala Ile Asn Phe
          20           25           30
Phe Val Tyr Leu Cys Met Tyr Leu Leu Ile Val Val Ile Ala Ser Tyr
          35           40           45
Ser Lys Ser Glu Tyr His Ala Ser Asp Ser Val Ala Gly Leu Val Val
          50           55           60
Gly Leu Phe Ile Val Gly Ser Leu Ile Gly Arg Phe Val Thr Gly Lys
65           70           75           80

```

Tyr Val Asn Arg Phe Gly Pro Lys Lys Ile Leu Ile Phe Gly Leu Ile  
 85 90 95  
 Cys Leu Val Val Thr Gln Leu Leu Tyr Phe Ile Pro Gly Ser Val Trp  
 100 105 110  
 Phe Leu Met Met Val Arg Leu Leu Asn Gly Leu Ala Thr Ala Val Ala  
 115 120 125  
 Thr Thr Ala Thr Gly Thr Ile Ala Ala Tyr Ile Thr Pro Pro Thr Arg  
 130 135 140  
 Lys Ser Glu Gly Ile Ser Leu Phe Ser Leu Ser Leu Val Leu Gly Thr  
 145 150 155 160  
 Ala Ile Gly Pro Phe Phe Gly Met Leu Leu Met Asn Ser Phe Ser Ile  
 165 170 175  
 Asn Ile Leu Phe Thr Ile Cys Val Ile Leu Gly Val Ile Ser Gly Leu  
 180 185 190  
 Leu Ser Leu Leu Ile Lys Ile Asn Phe Thr Thr Val Lys Glu Asn Thr  
 195 200 205  
 Ile Thr His Lys Arg Phe Asn Leu Ala His Phe Val Ala Lys Glu Ala  
 210 215 220  
 Ile Pro Val Ala Phe Val Met Leu Leu Ile Gly Val Thr Tyr Ala Ala  
 225 230 235 240  
 Ile Leu Thr Tyr Leu Gln Ala Phe Ala Val Glu Arg Asp Leu Val Thr  
 245 250 255  
 Ser Ala Ser Tyr Phe Phe Ile Phe Tyr Ala Ile Ala Ser Leu Ile Thr  
 260 265 270  
 Arg Pro Ile Ala Gly Arg Leu Met Asp Asp Lys Asn Glu Asn Val Val  
 275 280 285  
 Val Tyr Pro Ala Phe Ile Phe Leu Val Leu Ser Phe Val Leu Leu Met  
 290 295 300  
 Leu Ser Phe Asn Gly Trp Val Leu Leu Ile Ala Gly Ile Ala Leu Gly  
 305 310 315 320  
 Ile Gly Tyr Gly Asn Leu Ser Ser Cys Met Gln Ala Ile Ala Ile Lys  
 325 330 335  
 Val Ser Pro Ser Asn Lys Tyr Gly Leu Ala Thr Ser Thr Tyr Phe Ile  
 340 345 350  
 Gly Leu Asp Ile Gly Ile Gly Phe Gly Pro Ser Leu Leu Gly Leu Phe  
 355 360 365  
 Thr His Met Ile Ser Tyr Ser Gln Leu Tyr Gly Ile Met Gly Ile Leu  
 370 375 380  
 Gly Phe Ala Thr Leu Val Ile Tyr Ile Phe Val His Gly Arg Lys Val  
 385 390 395 400  
 Tyr Ser Thr Ser Tyr  
 405

&lt;210&gt; 6496

&lt;211&gt; 190

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6496

Asn Leu Cys Lys Glu Asp Glu Gln Val Thr Thr Lys His Leu Val Tyr  
 1 5 10 15  
 Thr Ala Leu Met Thr Ala Ile Ile Cys Ile Leu Gly Leu Val Pro Ser  
 20 25 30  
 Val Pro Leu Pro Phe Met Pro Val Pro Ile Val Leu Gln Asn Ile Gly  
 35 40 45  
 Ile Phe Leu Ala Gly Ile Ile Leu Gly Arg Lys Leu Gly Thr Thr Ser

|                     |                         |                         |     |    |
|---------------------|-------------------------|-------------------------|-----|----|
| 50                  |                         | 55                      |     | 60 |
| Val Ile Val Phe Leu | Leu Leu Val Ala Thr Gly | Leu Pro Val Leu Ser     |     |    |
| 65                  | 70                      | 75                      | 80  |    |
| Gly Gly Arg Gly Gly | Ile Gly Val Phe Ala Gly | Pro Ser Ala Gly Phe     |     |    |
|                     | 85                      | 90                      | 95  |    |
| Leu Phe Leu Tyr Pro | Val Val Ala Tyr Phe     | Ile Gly Ile Ile Arg Asp |     |    |
|                     | 100                     | 105                     | 110 |    |
| Ala Tyr Leu His Lys | Ile Asn Phe Leu Val     | Ile Phe Ile Ala Thr Leu |     |    |
|                     | 115                     | 120                     | 125 |    |
| Val Ile Gly Val Leu | Gly Leu Asp Ile Leu     | Gly Thr Leu Ile Met Gly |     |    |
|                     | 130                     | 135                     | 140 |    |
| Phe Ile Ile His Ile | Pro Ile Ser Lys Ala     | Phe Ile Leu Ser Phe Thr |     |    |
| 145                 | 150                     | 155                     | 160 |    |
| Phe Met Pro Gly Asp | Ile Ile Lys Ala Ile     | Ile Ala Ser Leu Ile Gly |     |    |
|                     | 165                     | 170                     | 175 |    |
| Ala Ala Ile Leu Asn | His Ser Arg Phe Lys     | Thr Leu Ile Gln         |     |    |
|                     | 180                     | 185                     | 190 |    |

&lt;210&gt; 6497

&lt;211&gt; 551

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6497

|                     |                     |                         |     |  |
|---------------------|---------------------|-------------------------|-----|--|
| Ile Lys Ser Asn Lys | Asp Lys His Ile Leu | Val Ile Ile Ile Lys Gly |     |  |
| 1                   | 5                   | 10                      | 15  |  |
| Ser Gly Arg Tyr Ser | Lys Met Asn Ala Ile | Lys Arg Phe Gly Ser Ala |     |  |
|                     | 20                  | 25                      | 30  |  |
| Met Ile Val Pro Val | Leu Met Phe Ala Phe | Phe Gly Ile Val Leu Gly |     |  |
|                     | 35                  | 40                      | 45  |  |
| Phe Ala Thr Leu Phe | Lys Asn Pro Thr Ile | Met Gly Gly Leu Ala Asp |     |  |
|                     | 50                  | 55                      | 60  |  |
| Gln Gln Thr Phe Trp | Phe Lys Phe Trp Ser | Val Ile Glu Ser Gly Gly |     |  |
| 65                  | 70                  | 75                      | 80  |  |
| Trp Val Ile Phe Thr | His Met Glu Ile Val | Phe Val Val Gly Leu Pro |     |  |
|                     | 85                  | 90                      | 95  |  |
| Leu Ser Leu Ala Lys | Lys Ala Pro Gly His | Ala Ala Leu Ala Ala Leu |     |  |
|                     | 100                 | 105                     | 110 |  |
| Met Gly Tyr Leu Met | Phe Asn Thr Phe Ile | Asn Ala Ile Leu Thr Gln |     |  |
|                     | 115                 | 120                     | 125 |  |
| Trp Pro His Thr Phe | Gly Ala Asn Leu Lys | Lys Gly Val Glu Asn Thr |     |  |
|                     | 130                 | 135                     | 140 |  |
| Thr Gly Leu Lys Ser | Ile Ala Gly Ile Glu | Thr Leu Asp Thr Asn Ile |     |  |
| 145                 | 150                 | 155                     | 160 |  |
| Leu Gly Ala Ile Ile | Ile Ser Gly Ile Ile | Thr Trp Ile His Asn Arg |     |  |
|                     | 165                 | 170                     | 175 |  |
| Tyr Tyr Ser Lys Arg | Leu Pro Glu Met Leu | Gly Val Phe Gln Gly Leu |     |  |
|                     | 180                 | 185                     | 190 |  |
| Thr Phe Val Val Thr | Ile Ser Phe Phe Val | Met Leu Pro Val Ala Ala |     |  |
|                     | 195                 | 200                     | 205 |  |
| Ile Thr Cys Val Val | Trp Pro Thr Ile Gln | His Gly Ile Ala Ser Ile |     |  |
|                     | 210                 | 215                     | 220 |  |
| Gln Tyr Phe Ile Val | Ala Ser Gly Tyr Ile | Gly Val Trp Leu Tyr His |     |  |
| 225                 | 230                 | 235                     | 240 |  |
| Phe Leu Glu Arg Val | Leu Ile Pro Thr Gly | Leu His His Phe Ile Tyr |     |  |
|                     | 245                 | 250                     | 255 |  |

Ala Pro Ile Glu Val Gly Pro Val Val Val Asn His Gly Leu Lys Ala  
 260 265 270  
 Glu Trp Leu Gln His Leu Asn Gln Phe Ala Glu Ser Asn Lys Pro Leu  
 275 280 285  
 Lys Glu Gln Phe Pro Tyr Gly Phe Met Leu Gln Gly Asn Gly Lys Val  
 290 295 300  
 Phe Gly Cys Leu Gly Ile Ala Leu Ala Met Tyr Ala Thr Thr Pro Lys  
 305 310 315 320  
 Glu Asn Arg Lys Lys Val Ala Ala Leu Leu Ile Pro Ala Thr Leu Thr  
 325 330 335  
 Ala Val Val Ala Gly Ile Thr Glu Pro Leu Glu Phe Thr Phe Leu Phe  
 340 345 350  
 Ile Ala Pro Phe Leu Phe Val Leu His Ala Leu Leu Ala Ala Thr Met  
 355 360 365  
 Asp Thr Leu Met Tyr Gly Phe Gly Val Val Gly Asn Met Gly Gly Gly  
 370 375 380  
 Val Leu Asp Phe Ile Ala Thr Asn Trp Ile Pro Leu Gly Lys Ala His  
 385 390 395 400  
 Trp Met Thr Tyr Val Phe Gln Val Val Ile Gly Leu Ile Phe Val Ala  
 405 410 415  
 Ile Tyr Tyr Phe Leu Phe Lys Tyr Leu Ile Leu Lys Phe Asp Ile Pro  
 420 425 430  
 Leu Pro Gly Arg Lys Lys Gly Glu Glu Glu Val Lys Leu Phe Ser Lys  
 435 440 445  
 Gln Asp Tyr Lys Asp Lys Lys Gly Asp Ser Thr Arg Asn His Ser Pro  
 450 455 460  
 Asn Ser Glu Tyr Glu Glu Lys Ala Met Tyr Tyr Leu Glu Gly Leu Gly  
 465 470 475 480  
 Gly Lys Glu Asn Ile Lys Asp Val Thr Asn Cys Thr Thr Arg Leu Arg  
 485 490 495  
 Leu Thr Val Lys Asp Glu Ser Lys Val Gln Glu Ser Ala Tyr Phe Thr  
 500 505 510  
 His Asn Gln Met Ser His Gly Leu Val Lys Ser Gly Lys Ser Val Gln  
 515 520 525  
 Val Val Val Gly Met Ser Val Pro Gln Val Arg Glu Ala Phe Glu Asn  
 530 535 540  
 Ile Val Asn Asp Asp Leu Ser  
 545 550

&lt;210&gt; 6498

&lt;211&gt; 244

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6498

Asn Pro Ile Lys Leu Asn Lys Phe Leu Lys Asn Ile Asn Phe Leu Tyr  
 1 5 10 15  
 Lys Glu Phe Arg Ala Met Pro Asp Leu Thr Ser Phe Trp Ile Ser Phe  
 20 25 30  
 Arg Val Ala Leu Ile Ser Thr Met Ile Val Thr Ile Phe Gly Ile Leu  
 35 40 45  
 Ile Ser Lys Trp Leu Tyr Asn Lys Asn Arg Tyr Trp Val Asn Leu Leu  
 50 55 60  
 Glu Ser Phe Ile Ile Leu Pro Ile Val Leu Pro Pro Thr Val Leu Gly  
 65 70 75 80  
 Phe Ile Leu Leu Ile Ile Phe Ser Thr Arg Ser Pro Val Gly Glu Phe



```

      115              120              125
Val Ser Leu Asp Ala Ile Glu Asp Asn Val Phe Gln Glu Ile Asn Asn
 130              135              140
Arg Asn Ile Lys Ala Ser Thr Ile Leu Glu Gln Ile Asp Tyr Ala Ile
 145              150              155              160
Ser Ile Gly Phe Glu Val Lys Val Asn Val Val Ile Gln Lys Gly Val
      165              170              175
Asn Asp Asn Gln Ile Ile Pro Met Ile Asp Tyr Phe Lys Asn Lys Asn
      180              185              190
Ile Glu Val Arg Phe Ile Glu Phe Met Asp Val Gly Asn Asp Asn Gly
      195              200              205
Trp Asn Phe Asn Lys Val Val Thr Lys Glu Glu Met Leu Asn Met Ile
      210              215              220
Glu Gln His Phe Glu Ile Ser Pro Val Thr Pro Lys Tyr Tyr Gly Glu
 225              230              235              240
Val Ala Lys Tyr Phe Arg His Lys Asp Asn Asp Ala Gln Phe Gly Leu
      245              250              255
Ile Thr Ser Val Ser Glu Ser Phe Cys Ser Thr Cys Thr Arg Ala Arg
      260              265              270
Leu Ser Ser Asp Gly Lys Phe Tyr Gly Cys Leu Phe Ala Ser Ser Glu
      275              280              285
Gly Phe Asp Val Lys Ala Leu Ile Arg Ser Gly Ala Thr Asp Asp Asp
      290              295              300
Leu Lys Ala Gln Phe Lys Arg Leu Trp Ser Ile Arg Asn Asp Gln Tyr
 305              310              315              320
Ser Asp Asn Arg Thr Met Gln Thr Ile Glu Asn Asn Arg Lys Lys Lys
      325              330              335
Ile Asn Met Asn Tyr Ile Gly Gly
      340

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<210> 6501
<211> 56
<212> PRT
<213> S.epidermidis

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```

<400> 6501
Ile Ile Lys Asn Thr Tyr Arg Ile Ile Phe Ser His Met Ser Ser Ser
 1              5              10              15
Arg Cys Pro Ser Val Tyr Leu Lys Leu Asn Phe Ser Pro Ile Ala Lys
      20              25              30
Leu Asn Leu Thr Arg Gln His Leu Phe Phe Ser Val Tyr Tyr Thr Thr
      35              40              45
Leu Glu Lys Leu Val Val Thr Asn
      50              55

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<210> 6502
<211> 1051
<212> PRT
<213> S.epidermidis

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```

<400> 6502
Met Ile Lys Lys Leu Leu Gln Phe Ser Leu Gly Asn Lys Phe Ala Ile
 1              5              10              15
Phe Leu Met Val Val Leu Ile Ile Leu Gly Gly Val Tyr Ser Ser Ala
      20              25              30
Lys Leu Lys Leu Glu Leu Leu Pro Asp Val Glu Asn Pro Val Ile Ser

```



|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|     |     |     |     | 485 |     |     |     |     | 490 |     |     |     |     | 495 |     |  |  |
| Arg | Pro | Phe | Ala | Leu | Ala | Ile | Thr | Phe | Ser | Leu | Leu | Ala | Ser | Leu | Leu |  |  |
|     |     |     | 500 |     |     |     |     | 505 |     |     |     |     | 510 |     |     |  |  |
| Val | Ser | Ile | Thr | Leu | Val | Pro | Ser | Leu | Gly | Ala | Thr | Phe | Phe | Lys | Asn |  |  |
|     |     | 515 |     |     |     |     | 520 |     |     |     |     | 525 |     |     |     |  |  |
| Gly | Val | Lys | Asn | Arg | Glu | Gln | Lys | Glu | Gly | Leu | Gly | Thr | Val | Gly | Arg |  |  |
|     |     | 530 |     |     |     | 535 |     |     |     |     | 540 |     |     |     |     |  |  |
| Ala | Tyr | Arg | Ser | Ala | Leu | Asn | Trp | Ser | Leu | Asn | His | Lys | Trp | Ile | Val |  |  |
| 545 |     |     |     |     | 550 |     |     |     |     | 555 |     |     |     |     | 560 |  |  |
| Leu | Ile | Val | Ser | Ile | Phe | Ile | Leu | Val | Gly | Ser | Val | Val | Ile | Gly | Ala |  |  |
|     |     |     | 565 |     |     |     |     |     | 570 |     |     |     |     | 575 |     |  |  |
| Arg | Asn | Leu | Gly | Thr | Ser | Tyr | Ile | Ser | Thr | Gly | Asp | Asn | Lys | Phe | Leu |  |  |
|     |     | 580 |     |     |     |     |     | 585 |     |     |     |     | 590 |     |     |  |  |
| Ala | Leu | Thr | Tyr | Thr | Pro | Lys | Pro | Gly | Glu | Thr | Gln | Lys | Ser | Val | Thr |  |  |
|     |     | 595 |     |     |     |     | 600 |     |     |     |     | 605 |     |     |     |  |  |
| Gln | His | Ala | Glu | Lys | Val | Gln | Asn | Tyr | Leu | Asp | Lys | Lys | Asp | Lys | Val |  |  |
|     | 610 |     |     |     |     | 615 |     |     |     |     | 620 |     |     |     |     |  |  |
| Glu | Thr | Val | Gln | Tyr | Ser | Ile | Gly | Gly | Pro | Thr | Pro | Gln | Asp | Pro | Thr |  |  |
| 625 |     |     |     |     | 630 |     |     |     |     | 635 |     |     |     |     | 640 |  |  |
| Gly | Ser | Thr | Asn | Ser | Met | Ala | Ile | Met | Ile | Lys | Tyr | Gln | Ser | Asp | Thr |  |  |
|     |     |     | 645 |     |     |     |     | 650 |     |     |     |     |     | 655 |     |  |  |
| Pro | Asn | Phe | Asp | Glu | Glu | Pro | Asp | Lys | Val | Leu | Lys | His | Ile | Glu | Thr |  |  |
|     |     | 660 |     |     |     |     | 665 |     |     |     |     |     | 670 |     |     |  |  |
| Phe | Lys | Gln | Pro | Gly | Glu | Trp | Lys | Asn | Gln | Asp | Leu | Gly | Thr | Gly | Ala |  |  |
|     |     | 675 |     |     |     |     | 680 |     |     |     |     | 685 |     |     |     |  |  |
| Gly | Asn | Asn | Ser | Val | Glu | Val | Thr | Val | Lys | Gly | Pro | Asn | Thr | Ser | Ala |  |  |
|     | 690 |     |     |     |     | 695 |     |     |     |     | 700 |     |     |     |     |  |  |
| Met | Lys | Asp | Thr | Val | Asn | Arg | Val | Glu | Lys | Met | Met | Thr | Asp | Ile | Lys |  |  |
| 705 |     |     |     |     | 710 |     |     |     |     | 715 |     |     |     |     | 720 |  |  |
| Gly | Ile | Thr | Asn | Val | Lys | Ser | Asp | Leu | Ser | Gln | Thr | Tyr | Asp | Gln | Tyr |  |  |
|     |     |     | 725 |     |     |     |     |     | 730 |     |     |     |     | 735 |     |  |  |
| Glu | Ile | Lys | Val | Asp | Gln | Asn | Lys | Ala | Ala | Asp | Asn | Gly | Ile | Ser | Ala |  |  |
|     |     |     | 740 |     |     |     |     | 745 |     |     |     |     | 750 |     |     |  |  |
| Ala | Gln | Leu | Ala | Met | Asn | Leu | Asn | Glu | Asn | Leu | Pro | Glu | Lys | Thr | Ile |  |  |
|     |     | 755 |     |     |     |     | 760 |     |     |     |     | 765 |     |     |     |  |  |
| Ser | Thr | Val | Asn | Glu | Lys | Gly | Lys | Ser | Ile | Asp | Val | Lys | Val | Lys | Gln |  |  |
|     | 770 |     |     |     |     | 775 |     |     |     |     | 780 |     |     |     |     |  |  |
| Asn | Lys | Gln | Thr | Asp | Trp | Ser | Ser | Gln | Lys | Ile | Lys | Asn | Ile | Lys | Leu |  |  |
| 785 |     |     |     |     | 790 |     |     |     |     | 795 |     |     |     |     | 800 |  |  |
| Asn | Lys | Pro | Thr | Gly | Gly | Thr | Ile | Lys | Leu | Ser | Glu | Ile | Ala | Ser | Leu |  |  |
|     |     |     | 805 |     |     |     |     |     | 810 |     |     |     |     | 815 |     |  |  |
| Lys | Lys | Ser | Tyr | Thr | Pro | Ser | Lys | Leu | Thr | Gln | Glu | Asp | Gly | Asp | Tyr |  |  |
|     |     | 820 |     |     |     |     |     | 825 |     |     |     |     | 830 |     |     |  |  |
| Ala | Thr | Thr | Val | Thr | Gly | Lys | Val | Thr | Asp | Lys | Asp | Val | Gly | Gly | Lys |  |  |
|     |     | 835 |     |     |     |     | 840 |     |     |     |     | 845 |     |     |     |  |  |
| Ser | Gln | Gln | Val | Met | Ala | Lys | Val | Lys | Asp | Leu | Glu | Lys | Pro | Ser | His |  |  |
|     |     | 850 |     |     |     | 855 |     |     |     |     | 860 |     |     |     |     |  |  |
| Ile | Lys | Ile | Asn | Val | Gly | Gly | Ala | Thr | Asp | Asp | Ile | Asp | Lys | Ala | Ile |  |  |
| 865 |     |     |     |     | 870 |     |     |     | 875 |     |     |     |     |     | 880 |  |  |
| Ser | Gln | Leu | Ala | Met | Ala | Met | Ile | Ala | Ala | Ile | Ile | Ile | Val | Tyr | Leu |  |  |
|     |     |     | 885 |     |     |     |     | 890 |     |     |     |     |     | 895 |     |  |  |
| Ile | Leu | Val | Ile | Thr | Phe | Arg | Gly | Gly | Leu | Ala | Pro | Phe | Thr | Ile | Leu |  |  |
|     |     | 900 |     |     |     |     | 905 |     |     |     |     |     | 910 |     |     |  |  |
| Phe | Ser | Leu | Pro | Phe | Thr | Val | Ile | Gly | Val | Val | Leu | Ala | Leu | Ile | Ile |  |  |
|     |     | 915 |     |     |     |     | 920 |     |     |     |     | 925 |     |     |     |  |  |
| Thr | Gly | Glu | Thr | Ile | Ser | Val | Pro | Ser | Leu | Ile | Gly | Met | Leu | Met | Leu |  |  |





Ile Asp Asn Lys Ile Lys Lys Thr Asn Glu Leu Lys Ser Asp Leu Thr  
                   275                  280                  285  
 Glu Leu Glu Lys Ser Glu Pro Glu Gly Ile Tyr Leu Ser Gly Ala Leu  
                   290                  295                  300  
 Leu Met Phe Ala Gly Asn Lys Ser Tyr Tyr Leu Tyr Gly Ala Ser Ser  
 305                  310                  315                  320  
 Asn Asp Tyr Arg Asp Phe Leu Pro Asn His His Met Gln Phe Glu Met  
                   325                  330                  335  
 Met Lys Tyr Ala Arg Glu His Gly Ala Thr Thr Tyr Asp Phe Gly Gly  
                   340                  345                  350  
 Thr Asp Asn Asp Pro Asp Lys Asp Ser Glu His Tyr Gly Leu Trp Ala  
                   355                  360                  365  
 Phe Lys Arg Val Trp Gly Thr Tyr Leu Ser Glu Lys Ile Gly Glu Phe  
                   370                  375                  380  
 Asp Tyr Val Leu Asn Gln Pro Leu Tyr His Leu Val Glu Lys Val Lys  
 385                  390                  395                  400  
 Pro Arg Leu Thr Lys Ala Lys Ile Lys Ile Ser Arg Lys Leu Lys Gly  
                   405                  410                  415  
 Lys

<210> 6504  
 <211> 231  
 <212> PRT  
 <213> S.epidermidis

<400> 6504  
 Leu Ser Leu Asn Lys Leu Glu Arg Gln Asn Arg Ile Ile Gln Thr Ile  
 1                  5                  10                  15  
 Gln Ser Ser Asp Lys Ile Thr Ala Ser Gln Leu Ala Lys Gln Phe Asn  
                   20                  25                  30  
 Val Ser Lys Arg Thr Ile Leu Arg Asp Ile Asp Glu Leu Glu Asp Gln  
                   35                  40                  45  
 Gly Val Lys Val Tyr Ala Arg His Gly Lys Leu Gly Gly Tyr Gln Ile  
                   50                  55                  60  
 Lys Asp Ala His Ala Lys Ile Thr Leu Ser Leu Thr Glu Gln Gln Leu  
 65                  70                  75                  80  
 Ser Ala Leu Phe Leu Thr Leu Asn Glu Ser Gln Ser Asn Ser Thr Leu  
                   85                  90                  95  
 Pro Tyr Gln Asn Glu Ile Arg Ala Ile Ile Lys Gln Cys Leu Asn Leu  
                   100                  105                  110  
 Pro Gln Thr Arg Leu Arg Lys Met Leu Lys Lys Met Asp Tyr Tyr Ile  
                   115                  120                  125  
 Lys Phe Glu Asp Ser Asn His Val Thr Leu Pro Gln Leu Phe Ser Asp  
                   130                  135                  140  
 Ile Leu Ile Tyr Cys Thr Glu Arg Asn Val Met Leu Val Asp Leu Asn  
 145                  150                  155                  160  
 Glu Asn Asn Gln Ile Gln Ala Glu Asn Val Ile Phe Ile Gly Leu Ile  
                   165                  170                  175  
 Cys Lys Asn Ala Val Trp His Ala Val Val Phe Glu Ile Gly Arg Gly  
                   180                  185                  190  
 Tyr Thr Arg Glu Leu Ser Ile Leu Asp Ile Gln Asp Ile Ser Tyr Ser  
                   195                  200                  205  
 Phe Glu Lys Thr Ile Gln Thr Gln Asp Ile Ser Ile Glu Asn Tyr Arg  
                   210                  215                  220  
 Gln Phe Leu Ala Pro Ser Glu

225

230

<210> 6505  
 <211> 263  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6505

Ala Ile Met Lys Ile Lys His Ile Phe Ile Ile Ile Leu Thr Leu Cys  
 1 5 10 15  
 Val Val Leu Ala Gly Cys Thr Asn Glu Lys Gly Gln Asn Lys Glu Gln  
 20 25 30  
 Asn Glu Lys Gln Ser Thr Lys Gly Asp Lys Gln Glu Leu Gln Val Ser  
 35 40 45  
 Ala Ala Ala Ser Leu Thr Glu Val Ser Lys Ala Leu Gly Asn Glu Phe  
 50 55 60  
 Lys Lys Asp His Pro Asn Val Glu Ile Lys Phe Asn Tyr Gly Gly Ser  
 65 70 75 80  
 Gly Ala Leu Arg Gln Gln Ile Glu Ala Gly Ala Pro Ser Asp Val Met  
 85 90 95  
 Met Ser Ala Asn Thr Lys Asp Ile Asp Leu Leu Lys Lys Lys Asn Lys  
 100 105 110  
 Ala His Asp Thr Tyr Asn Tyr Ala Lys Asn Gln Leu Val Leu Ile Gly  
 115 120 125  
 Asp Lys Asn Lys Ser Tyr Thr Ser Val Lys Asp Leu Asn Gln Asn Asp  
 130 135 140  
 Lys Leu Ala Leu Gly Gln Ile Lys Thr Val Pro Ala Gly Lys Tyr Ala  
 145 150 155 160  
 Lys Gln Tyr Leu Asp Asp Gln His Leu Tyr Gly Asp Val Lys Asp Lys  
 165 170 175  
 Ile Ile Phe Ala Lys Asp Val Lys Gln Val Leu Asn Tyr Val Glu Lys  
 180 185 190  
 Gly Asn Ala Gln Glu Gly Phe Val Tyr Lys Thr Asp Leu Tyr Gln Gln  
 195 200 205  
 Lys Lys Lys Ala Asn Lys Val Lys Val Ile Glu Glu Ile Lys Leu Ser  
 210 215 220  
 Lys Pro Ile Thr Tyr Lys Ala Gly Ala Thr Ser Asp Lys Lys Leu Ala  
 225 230 235 240  
 Lys Glu Trp Ile Asn Phe Leu Lys Ser Asn Lys Ala Lys Gln Ile Leu  
 245 250 255  
 Lys Glu Tyr Gln Phe Ser Val  
 260

<210> 6506  
 <211> 50  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6506

Met Val Met Asn Leu Ser Leu Leu Ser Ile Asn Trp Cys Ile Gln Gln  
 1 5 10 15  
 His Lys His Lys Lys Ser Tyr Glu Asp Ile Glu Leu Ser Leu Tyr Leu  
 20 25 30  
 His Ser Ser Leu Phe Ile Lys Met Thr Ala Phe Leu Ile Phe Asn Phe  
 35 40 45  
 Ile Ile

50

<210> 6507  
 <211> 50  
 <212> PRT  
 <213> S.epidermidis

<400> 6507  
 Met Thr Lys Lys Thr Ile Ala Ala Met Thr Val Arg Thr Ile Ile Asp  
 1 5 10 15  
 Asp Ile Glu Ala Ser Phe Ile Val Asn Lys Leu Arg Ile Lys Asn Ala  
 20 25 30  
 Val Ile Asn Ile Lys Glu Asn Leu Ile Ala Arg Ile Thr Ser Ala Leu  
 35 40 45  
 Phe Ile  
 50

<210> 6508  
 <211> 163  
 <212> PRT  
 <213> S.epidermidis

<400> 6508  
 Arg Arg Ile Asp Thr Met Ile Leu Gln Ile Val Gly Met Lys Asn Ser  
 1 5 10 15  
 Gly Lys Thr Thr Leu Met Asn His Ala Ile Ser Phe Leu Lys Glu Arg  
 20 25 30  
 Gly Tyr Ser Val Ala Thr Ile Lys His His Gly His Ile Gly Glu Glu  
 35 40 45  
 Ile Glu Leu Gln Ser Ser Asp Val Asp His Met Lys His Phe Ala Ala  
 50 55 60  
 Gly Ala Asp Gln Ser Ile Val Gln Gly His His Leu Gln Gln Thr Val  
 65 70 75 80  
 Thr Arg Lys Lys Lys Gln Ser Leu Arg Glu Ile Ile Glu Asn Ser Val  
 85 90 95  
 Thr Ile Asp Tyr Ser Ile Ile Leu Val Glu Gly Phe Lys Glu Ala Asn  
 100 105 110  
 Tyr Asp Lys Ile Ile Val Tyr Lys Asn Asn Asp Glu Leu Arg Ser Leu  
 115 120 125  
 Gln Gly Leu Ser His Val Ile Gly Lys Ile Glu Thr Asn His Pro Arg  
 130 135 140  
 Ala Asn Asn Gln Leu Glu His Leu Leu Asn Lys Leu Ile Lys Asp Lys  
 145 150 155 160  
 Gly Met Asn

<210> 6509  
 <211> 262  
 <212> PRT  
 <213> S.epidermidis

<400> 6509  
 Glu Leu Val Glu Met Leu Lys Asn Thr Arg Leu Arg Met Thr Thr Leu  
 1 5 10 15  
 Phe Ile Ile Ser Ile Leu Val Ile Leu Ala Ile Leu Phe Leu Ile Phe  
 20 25 30

Asp Thr Asn Leu Phe Lys Asn Asp Val Lys His Thr Phe Lys Glu Ala  
           35                  40                  45  
 Val Ser Leu Gln Thr Ser Glu Gly Asn Ile His Thr Lys Glu Val Asn  
           50                  55                  60  
 Gly Lys Phe Ile Tyr Ala Ser Lys Gln Asp Ile Glu Lys Ala Met Gln  
 65                  70                  75                  80  
 Ile Lys His Ser Asp Asn Asp Leu Lys Tyr Met Asp Ile Ser Glu Lys  
                   85                  90                  95  
 Val Pro Met Ser Glu Lys Glu Val Asn His Ile Leu Lys Gly Lys Gly  
           100                  105                  110  
 Ile Leu Glu Asn Lys Gly Ser Thr Phe Ile Lys Ala Gln Asp Lys Tyr  
           115                  120                  125  
 Glu Val Asn Ile Leu Tyr Leu Ile Ser His Ala Leu Val Glu Thr Gly  
           130                  135                  140  
 Asn Gly Gln Ser Asp Leu Ser Lys Gly Ile Lys Glu Gly Asn Tyr His  
 145                  150                  155                  160  
 Tyr Tyr Asn Phe Phe Gly Ile Gly Ala Phe Asp Glu Asp Ala Val Lys  
                   165                  170                  175  
 Thr Gly Lys Ser Phe Ala Lys Gln Lys Lys Trp Thr Thr Pro Glu Lys  
           180                  185                  190  
 Ala Ile Met Gly Gly Ala Trp Phe Val Arg Tyr His Tyr Phe Lys Asn  
           195                  200                  205  
 Asn Gln Leu Ser Leu Tyr Gln Met Arg Trp Asn Pro Gln Asn Pro Gly  
           210                  215                  220  
 Gln His Gln Tyr Ala Ser Asp Ile Gln Trp Ala Asn Asn Ile Ala Asp  
 225                  230                  235                  240  
 Leu Met Glu Lys Tyr Tyr Asp Lys Tyr Gly Ile Lys Lys Asp His Ile  
                   245                  250                  255  
 Arg Lys Lys Tyr Tyr Lys  
           260

<210> 6510  
 <211> 47  
 <212> PRT  
 <213> S.epidermidis

<400> 6510  
 Tyr Asn Tyr Asp Lys Leu Phe Ser His Ile Asp Ser Phe Phe Leu Val  
 1                  5                  10                  15  
 Tyr Thr Asn Glu Tyr Phe Asp Ile Val Ser His Leu Phe Arg Ser Ile  
           20                  25                  30  
 Val Phe Arg Asp Ile Ile Phe Ile Lys Cys Lys Asn Tyr Tyr Tyr  
           35                  40                  45

<210> 6511  
 <211> 208  
 <212> PRT  
 <213> S.epidermidis

<400> 6511  
 Glu Ala Tyr Glu Met Ser Asn Pro Ile Lys Ile Gly Ile Gly Gly Pro  
 1                  5                  10                  15  
 Val Gly Ala Gly Lys Thr Gln Leu Ile Glu Lys Val Val Lys Arg Leu  
           20                  25                  30  
 Ala Lys Glu Met Ser Ile Gly Val Ile Thr Asn Asp Ile Tyr Thr Lys  
           35                  40                  45

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Asp | Glu | Lys | Ile | Leu | Val | Asn | Thr | Gly | Val | Leu | Pro | Glu | Asp | Arg |
| 50  |     |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Ile | Gly | Val | Glu | Thr | Gly | Gly | Cys | Pro | His | Thr | Ala | Ile | Arg | Glu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Asp | Ala | Ser | Met | Asn | Phe | Ala | Ala | Ile | Asp | Glu | Leu | Leu | Glu | Arg | Asn |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asp | Asp | Ile | Glu | Leu | Ile | Phe | Ile | Glu | Ser | Gly | Gly | Asp | Asn | Leu | Ala |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Ala | Thr | Phe | Ser | Pro | Glu | Leu | Val | Asp | Phe | Ser | Ile | Tyr | Ile | Ile | Asp |
|     |     | 115 |     |     |     |     |     | 120 |     |     |     | 125 |     |     |     |
| Val | Ala | Gln | Gly | Glu | Lys | Ile | Pro | Arg | Lys | Gly | Gly | Gln | Gly | Met | Ile |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Lys | Ser | Asp | Phe | Phe | Ile | Ile | Asn | Lys | Thr | Asp | Leu | Ala | Pro | Tyr | Val |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gly | Ala | Ser | Leu | Asp | Gln | Met | Ala | Lys | Asp | Thr | Glu | Val | Phe | Arg | Gly |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Asn | Arg | Pro | Phe | Ala | Phe | Thr | Asn | Leu | Lys | Thr | Asp | Glu | Gly | Leu | Glu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Lys | Val | Ile | Glu | Trp | Ile | Glu | His | Asp | Val | Leu | Leu | Lys | Gly | Leu | Thr |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |

<210> 6512  
 <211> 150  
 <212> PRT  
 <213> S.epidermidis

<400> 6512

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Asp | Asn | Glu | Val | Leu | Asn | Ile | Leu | Thr | Asn | Glu | Phe | Phe | Asn | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Phe | Ile | Gly | Ile | Tyr | Arg | Pro | Tyr | Ile | Lys | Leu | Thr | Gln | Pro | Ile | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Asp | Gln | His | Gln | Ile | His | Thr | Gly | Gln | Trp | Leu | Val | Leu | Arg | Asp | Ile |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Asn | Tyr | Gln | Pro | Thr | Thr | Leu | Val | Lys | Ile | Ser | His | Arg | Arg | Ser |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Glu | Lys | Pro | Thr | Thr | Arg | Lys | Leu | Ile | Lys | Val | Leu | Leu | Asp | Asn |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Gly | Trp | Val | Met | Thr | Lys | Thr | Gly | Val | Asp | Lys | Arg | Glu | Lys | Leu | Leu |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Leu | Thr | Asp | Lys | Gly | Gln | Ile | Leu | Phe | Glu | Thr | Ile | Asn | Lys | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Val | Thr | Val | Ile | Gln | Gln | Asp | Ile | Ile | Lys | Lys | Thr | Gly | Leu | Thr | Asp |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Glu | Gln | Val | Phe | Asp | Ile | Thr | Asn | Ala | Met | Ser | Gln | Ile | His | Glu | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Met | Ile | Lys | Glu | Glu | Gln |     |     |     |     |     |     |     |     |     |     |
| 145 |     |     |     |     | 150 |     |     |     |     |     |     |     |     |     |     |

<210> 6513  
 <211> 276  
 <212> PRT  
 <213> S.epidermidis

<400> 6513

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Glu | Gly | Glu | Ile | Met | Thr | Glu | Leu | Tyr | Leu | Lys | Lys | Leu | Asp | Glu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

Tyr Ile Cys Gln Trp Ile Arg Gly Leu Asp Asp Ile Ile Pro Arg Leu  
                   20                  25                  30  
 Val Glu Lys Met Glu Thr Ser Thr Lys Lys Asp Arg Phe Asp Leu Val  
                   35                  40                  45  
 Thr Asn Val Asp Lys Gln Ile Gln Asn His Phe Gln Asn Phe Leu Gln  
                   50                  55                  60  
 Glu His Tyr Pro Thr His Gln Leu Leu Ala Glu Glu Lys Asp Asn Ser  
 65                  70                  75                  80  
 Asp Ile Thr Pro Tyr Glu Gly His Leu Trp Ile Met Asp Pro Ile Asp  
                   85                  90                  95  
 Gly Thr Ser Asn Leu Val Lys Gln Gln Glu Asp Tyr Cys Ile Ile Ile  
                   100                  105                  110  
 Gly Tyr Phe Ile Asp Gly Glu Pro Lys Leu Ser Tyr Ile Tyr Asp Tyr  
                   115                  120                  125  
 Pro His Gln Arg Leu Tyr Arg Ala Ile Ala Gly Ile Gly Ala Tyr Glu  
                   130                  135                  140  
 Asn Asn Gln Leu Met Thr Met Pro Lys Arg Ile Gly Leu Arg Glu Ala  
 145                  150                  155                  160  
 Ile Ile Ser Phe Lys Pro Gln Val Leu Lys Glu Glu Thr Val Gln Ser  
                   165                  170                  175  
 Leu Phe Gln Ser Ala Phe Asp Phe Arg Ser Ile Gly Ser Cys Gly Leu  
                   180                  185                  190  
 Asp Ser Ile Arg Val Ile Lys Gly Gln Phe Gly Ala His Ile Asn Thr  
                   195                  200                  205  
 Asn Pro Lys Pro Trp Asp Ile Ser Ala Gln Phe Leu Phe Ala Arg Glu  
                   210                  215                  220  
 Leu Gly Leu Ile Met Thr Gln Ile Asn Gly Glu Pro Leu Asp Phe Ser  
 225                  230                  235                  240  
 Lys Ala Gly Pro Phe Ile Ile Ser Asn Pro Gly Cys Tyr Asp Asp Met  
                   245                  250                  255  
 Ile Arg Ile Leu Asn Glu Gly Gly Gly Tyr Ser Lys Ser Ser His His  
                   260                  265                  270  
 Ile Glu Arg Gly  
                   275

&lt;210&gt; 6514

&lt;211&gt; 270

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6514

Leu Lys Leu Asp Phe Val Lys Met Ser Asn Asn Met Trp Arg Gly Ile  
 1                  5                  10                  15  
 Lys Leu Asn Leu Lys Leu Asp His Ile Ile His Tyr Ile His Gln Leu  
                   20                  25                  30  
 Glu Ser Phe Lys Phe Pro Gly Glu Ile Leu Glu Leu Gln Asn Gly Gly  
                   35                  40                  45  
 Arg His His His Leu Gly Thr Phe Asn Gln Ile Ala Pro Ile Lys Asn  
                   50                  55                  60  
 Ser Tyr Ile Glu Leu Leu Asp Val Glu Asn Glu Ser Lys Leu Asn Asn  
 65                  70                  75                  80  
 Val Ala Lys Thr Glu Glu Gly Arg Val Ser Phe Ala Thr Lys Ile Val  
                   85                  90                  95  
 Gln Asp His Phe Lys Gln Gly Phe Lys Gly Ile Cys Phe Arg Thr Lys  
                   100                  105                  110  
 Asp Ile Asp Gln Val Lys Ser Ser Leu Glu Asn Arg Gly Val Asp Val

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      115              120              125
Ile Gly Pro Ile Asp Met Glu Arg Glu Asn Lys Lys Gly His Gln Leu
      130              135              140
Ser Trp Arg Leu Leu Tyr Ile Ala Asn Pro Asp Tyr Arg Val Lys Pro
145              150              155              160
Pro Phe Phe Ile Glu Trp Asp Asn Ser Lys Lys Gln Asn Leu Ser Gln
      165              170              175
Ile His Asn Phe Asn Leu Ser Ser Phe Lys Ile Lys Glu Val Ile Ile
      180              185              190
Thr Ser Thr Gln Arg Glu Thr Thr Val Ser Leu Trp Lys Glu Trp Tyr
      195              200              205
Asn Leu Lys Ile Val Asn Glu Thr Ala Thr Ser Thr Asp Leu Lys Leu
      210              215              220
Glu Thr Asp Glu Val Ile Tyr Lys Ile Glu Asp Gly Lys Asp Ser Gly
225              230              235              240
Phe His Thr Leu Ile Met Thr Asp Ile Asn Ala Thr Ala Pro Tyr Ser
      245              250              255
Ile Phe Ile Arg Gly Ala Lys Tyr Arg Phe Glu Pro Pro Asn
      260              265              270

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<210> 6515
<211> 55
<212> PRT
<213> S.epidermidis

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<400> 6515
Ile Lys Lys Asp Ser Ile Thr Phe Thr Pro Pro Met Thr His Phe Ile
1      5      10      15
Leu Asn Leu Ile Ile His Ser Leu Thr Leu Asp Phe Ile Phe Ser Lys
      20      25      30
Phe Thr Asn Gly Thr Ser Tyr Ala Phe Pro Ser Asp Ile Glu Lys Leu
      35      40      45
Thr Ile Asn Ile Tyr Ile Thr
50      55

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<210> 6516
<211> 64
<212> PRT
<213> S.epidermidis

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<400> 6516
Pro Phe Glu Glu Glu Asn Asp Thr Met Asp Leu Asn Ser Lys Leu Ser
1      5      10      15
Glu Leu Lys Tyr Asp Tyr Thr Arg Leu Gln Asn Asp Leu Glu Lys Arg
      20      25      30
Glu Ser Leu His Gln Asp Ile Asp Pro Leu Leu Lys Gln Leu Glu Asn
      35      40      45
Ile Glu Gln Glu Ile Ser Tyr Ile Arg Ser Lys Leu Asn Gln Gln Ser
50      55      60

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<210> 6517
<211> 249
<212> PRT
<213> S.epidermidis

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<400> 6517

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Leu Arg Lys Asp Tyr His Gln Met Gln Gln Gln Lys Ile Lys Arg Phe  
 1 5 10 15  
 Leu Ala His Phe Val Leu Asp His Val Thr Ile Glu Tyr Leu Lys Tyr  
 20 25 30  
 Gly His Gln Leu Thr Ile Glu Gln Leu Lys Leu Leu Ile Phe Ile Leu  
 35 40 45  
 His Phe Thr Glu Asn His Lys Glu Asp Leu Ser Leu Asn Met Ile Ile  
 50 55 60  
 Phe Tyr Lys Asn Tyr Gln Lys Asn Gln Leu Leu Lys Ser Ile Thr His  
 65 70 75 80  
 Leu Tyr Glu Phe Asn Trp Ile Ser Lys Lys Arg His Pro Tyr Asp Gln  
 85 90 95  
 Arg Arg Leu Val Ile Thr Leu Thr Gln Asn Gln Cys Ser Lys Ile Thr  
 100 105 110  
 Gln Leu Ile Asp Glu Leu Glu His Phe Leu Glu Val Lys Ser Thr Leu  
 115 120 125  
 Ile Asn Glu Ile Asn His Ser Thr Leu Leu Ser Tyr Tyr Leu Lys Cys  
 130 135 140  
 His Ser Gln Phe Arg Val Ile Glu Gln Ser Cys Thr Ser Gln His Leu  
 145 150 155 160  
 Thr Leu Glu Glu Leu Tyr Leu Leu Gly Leu Leu Ile Val Ser Asp Asn  
 165 170 175  
 Lys Thr Thr Phe Lys Ser Ile Lys Val His Ala Leu Lys Gly Ile Ile  
 180 185 190  
 Ala Met Gly Pro Ile Ile Lys Thr Leu Gln Ser Lys Gly Tyr Leu Ile  
 195 200 205  
 Lys Ser Arg Ser Arg Asp Asp Glu Arg Tyr Ile Val Leu Thr Leu Arg  
 210 215 220  
 Lys Glu Lys Ile Asn Val Ile Gln Ser Glu Ile Glu Glu Cys Tyr Asn  
 225 230 235 240  
 Lys Leu Glu Gln Gly Ile Gln His Val  
 245

<210> 6518  
 <211> 70  
 <212> PRT  
 <213> S.epidermidis

<400> 6518  
 Arg Met Asn Trp Arg Tyr Ser Lys Met Gly Tyr Ile Ile Leu Phe Phe  
 1 5 10 15  
 Ile Ala Gly Pro Val Ile Ile Gly Val Gly Asn Leu Ile Leu Gly Pro  
 20 25 30  
 Ile Phe Asn Lys Arg Thr Pro Leu His Val Gln Phe Arg Ser Phe Ile  
 35 40 45  
 Ile Gly Ser Leu Val Tyr Leu Ile Leu Ala Thr Ile Cys Tyr Phe Leu  
 50 55 60  
 Phe Leu Gln Gly Lys Leu  
 65 70

<210> 6519  
 <211> 261  
 <212> PRT  
 <213> S.epidermidis

<400> 6519



Leu Phe Ala Leu Ser Tyr Phe Thr Ile Leu Phe Ile Lys Glu Gly Val  
 1 5 10 15  
 Met Val Met Thr Lys Val Tyr Ile Ala Gly Ala Ile Pro Glu Val Gly  
 20 25 30  
 Leu Asn Leu Leu Lys Glu His Phe Glu Val Asp Met Tyr Asp Gly Glu  
 35 40 45  
 Gly Leu Ile Asp Lys Glu Thr Leu Lys Lys Gly Val. Glu His Ala Asp  
 50 55 60  
 Ala Leu Val Ser Leu Leu Ser Thr Ser Val Asp Lys Asp Ile Ile Asp  
 65 70 75 80  
 Ser Ala Asn Asn Leu Lys Ile Ile Ala Asn Tyr Gly Ala Gly Phe Asn  
 85 90 95  
 Asn Ile Asp Val Glu Tyr Ala Arg Gln Asn Ile Asp Val Thr Asn  
 100 105 110  
 Thr Pro His Ala Ser Thr Asn Ala Thr Ala Asp Leu Thr Ile Gly Leu  
 115 120 125  
 Ile Leu Ser Val Ala Arg Arg Ile Val Glu Gly Asp His Leu Ser Arg  
 130 135 140  
 Thr Thr Gly Phe Asp Gly Trp Ala Pro Leu Phe Phe Arg Gly Arg Glu  
 145 150 155 160  
 Val Ser Gly Lys Thr Ile Gly Ile Ile Gly Leu Gly Glu Ile Gly Gly  
 165 170 175  
 Ala Val Ala Lys Arg Ala Arg Ala Phe Asp Met Asp Val Leu Tyr Thr  
 180 185 190  
 Gly Pro His Arg Lys Glu Glu Lys Glu Arg Asp Ile Gly Ala Lys Tyr  
 195 200 205  
 Val Asp Leu Asp Thr Leu Leu Lys Asn Ala Asp Phe Ile Thr Ile Asn  
 210 215 220  
 Ala Ala Tyr Asn Pro Ser Leu His His Met Ile Asp Thr Glu Gln Phe  
 225 230 235 240  
 Asn Lys Met Lys Ser Thr Ala Tyr Leu Ile Asn Ala Gly Arg Gly Pro  
 245 250 255  
 Ile Val Asn Glu Gln Ser Leu Val Glu Ala Leu Asp Asn Lys Val Ile  
 260 265 270  
 Glu Gly Ala Ala Leu Asp Val Tyr Glu Phe Glu Pro Glu Ile Thr Asp  
 275 280 285  
 Ala Leu Lys Ser Phe Lys Asn Val Val Leu Thr Pro His Ile Gly Asn  
 290 295 300  
 Ala Thr Phe Glu Ala Arg Asp Met Met Ala Lys Ile Val Ala Asn Asp  
 305 310 315 320  
 Thr Ile Lys Lys Leu Asn Gly Asp Glu Pro Gln Phe Ile Val Asn  
 325 330 335

&lt;210&gt; 6522

&lt;211&gt; 182

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6522

Tyr Asn Tyr Ser Cys Ile Lys Ser Phe Phe Leu Gln Met Glu Val Lys  
 1 5 10 15  
 Pro Ile Met Asp Lys His Thr Asn Tyr Asn Glu Leu Glu Ser Lys Asn  
 20 25 30  
 Val Ser Asp Gln Thr Ser Ser Asp Asn Leu Ser Asn Asp Asn Ile Val  
 35 40 45  
 His Gln Gln Ser Thr Ile Gln Asn Glu Glu Ser Gln Asp Asn Arg Leu

50                      55                      60  
 Met Ala Met Leu Ile Tyr Leu Leu Ser Leu Phe Thr Gly Ile Ile Gly  
 65                      70                      75                      80  
 Pro Leu Ile Ile Trp Leu Ile Lys Arg Lys Glu Ser Arg Leu Val Asp  
                     85                      90                      95  
 Val Ser Gly Lys Thr Tyr Leu Asn Tyr Phe Ile Ser Tyr Thr Ile Tyr  
                     100                      105                      110  
 Ser Thr Val Gly Val Ile Cys Met Phe Met Ile Val Pro Leu Met Asn  
                     115                      120                      125  
 Ile Ser Glu Ser Leu Ala Ile Phe Ser Leu Ile Leu Leu Leu Val Val  
                     130                      135                      140  
 Val Phe Ile Leu Leu Ala Leu Leu Ile Met Ser Phe Val Cys Thr Ile  
 145                      150                      155                      160  
 Ile Ala Cys Val Lys Tyr Met Ser Gly Lys Thr Tyr Thr Ile Pro Leu  
                     165                      170                      175  
 Thr Ile Pro Phe Ile Lys  
                     180

<210> 6523

<211> 53

<212> PRT

<213> S.epidermidis

<400> 6523

Ser Pro Pro Ser Asn Ile Ile Ile Arg Asn Pro Ile Met Phe Ala Ile  
 1                      5                      10                      15  
 Ile Glu Thr Ile Pro Ala Phe Leu Glu Pro Ile Lys Ile Pro Ile Arg  
                     20                      25                      30  
 Ile Asn Lys Pro Pro Ile Met Leu Gly Ile Lys Asn Ile Cys Pro Asn  
                     35                      40                      45  
 Pro Ser Lys Thr Asp  
                     50

<210> 6524

<211> 110

<212> PRT

<213> S.epidermidis

<400> 6524

Lys Gly Trp Leu Phe Met Lys Leu Tyr Leu Ile Leu Leu Pro Val Leu  
 1                      5                      10                      15  
 Tyr Leu Ile Val Ser Tyr Ile Ser Ile Phe Lys Met His Ser Val Ile  
                     20                      25                      30  
 Thr Arg Ile Leu Arg Ile Val Met Gly Ile Leu Leu Leu Phe Val Val  
                     35                      40                      45  
 Ala Leu Thr Thr Leu Gln Phe Pro Lys Glu Asn Trp Trp Val Phe Val  
                     50                      55                      60  
 Val Leu Leu Leu Leu Val Gly Asn Val Glu Val Thr Gly Phe Lys Glu  
 65                      70                      75                      80  
 Leu Lys Asp Asp Lys Lys Gly Val Ser Ile Leu Asn Ile Leu Ser Leu  
                     85                      90                      95  
 Leu Leu Phe Val Ile Phe Ile Ile Leu Ile Phe Ile Leu Tyr  
                     100                      105                      110

<210> 6525

<211> 114

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6525

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Asn | Glu | Arg | Arg | Glu | Ile | Lys | Ser | Met | Ala | Trp | Leu | Phe | Leu | Met |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Ala | Gly | Ser | Phe | Glu | Ile | Leu | Gly | Val | Val | Leu | Leu | Asn | Glu | Leu |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ser | Arg | Thr | Lys | Asn | Lys | Ile | Tyr | Val | Ile | Phe | Leu | Gly | Leu | Ala | Phe |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ile | Leu | Ser | Phe | Ser | Thr | Leu | Lys | Phe | Ala | Met | Val | Ser | Ile | Pro | Met |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Thr | Ala | Tyr | Ala | Ile | Trp | Thr | Gly | Ile | Gly | Thr | Ala | Gly | Gly | Thr |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Leu | Ile | Gly | Met | Ile | Phe | Tyr | Gly | Glu | Ser | Thr | Arg | Leu | Ser | Arg | Ile |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Leu | Cys | Ile | Leu | Leu | Ile | Ile | Ile | Ser | Val | Val | Gly | Leu | Arg | Leu | Ile |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |

Ser Tyr

&lt;210&gt; 6526

&lt;211&gt; 573

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6526

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Ser | Met | Ser | Phe | Lys | Met | Thr | Gln | Ser | Gln | Tyr | Thr | Ser | Leu | Tyr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Pro | Thr | Val | Gly | Asp | Ser | Val | Arg | Leu | Gly | Asp | Thr | Asn | Leu | Phe |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Gln | Val | Glu | Lys | Asp | Tyr | Ala | Asn | Tyr | Gly | Asp | Glu | Ala | Thr | Phe |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Gly | Gly | Lys | Ser | Ile | Arg | Asp | Gly | Met | Ala | Gln | Asn | Pro | Asn | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Arg | Asp | Asp | Lys | Asn | Val | Ala | Asp | Leu | Val | Leu | Thr | Asn | Ala | Leu |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Ile | Ile | Asp | Tyr | Asp | Lys | Ile | Val | Lys | Ala | Asp | Ile | Gly | Ile | Lys | Asn |
|     |     |     |     | 85  |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Gly | Tyr | Ile | Phe | Lys | Ile | Gly | Lys | Ala | Gly | Asn | Pro | Asp | Ile | Met | Asp |
|     |     |     | 100 |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Asn | Val | Asp | Ile | Ile | Ile | Gly | Ala | Thr | Thr | Asp | Ile | Ile | Ala | Ala | Glu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gly | Lys | Ile | Val | Thr | Ala | Gly | Gly | Ile | Asp | Thr | His | Val | His | Phe | Ile |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asn | Pro | Glu | Gln | Ala | Glu | Val | Ala | Leu | Glu | Ser | Gly | Ile | Thr | Thr | His |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     |     | 160 |
| Ile | Gly | Gly | Gly | Thr | Gly | Ala | Ser | Glu | Gly | Ala | Lys | Ala | Thr | Thr | Val |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Thr | Pro | Gly | Pro | Trp | His | Ile | His | Arg | Met | Leu | Glu | Ala | Ala | Glu | Glu |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Met | Pro | Ile | Asn | Val | Gly | Phe | Thr | Gly | Lys | Gly | Gln | Ala | Val | Asn | His |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Thr | Ala | Leu | Ile | Glu | Gln | Ile | His | Ala | Gly | Ala | Ile | Gly | Leu | Lys | Val |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| His | Glu | Asp | Trp | Gly | Ala | Thr | Pro | Ser | Ala | Leu | Ser | His | Ala | Leu | Asp |

225                      230                      235                      240  
 Val Ala Asp Glu Phe Asp Ile Gln Val Ala Leu His Ala Asp Thr Leu  
                                  245                      250                      255  
 Asn Glu Ala Gly Phe Met Glu Asp Thr Met Ala Ala Val Lys Asp Arg  
                                  260                      265                      270  
 Val Leu His Met Tyr His Thr Glu Gly Ala Gly Gly Gly His Ala Pro  
                                  275                      280                      285  
 Asp Leu Ile Lys Ser Ala Ala Tyr Ser Asn Ile Leu Pro Ser Ser Thr  
                                  290                      295                      300  
 Asn Pro Thr Leu Pro Tyr Thr His Asn Thr Val Asp Glu His Leu Asp  
 305                                   310                      315                      320  
 Met Val Met Ile Thr His His Leu Asn Ala Ser Ile Pro Glu Asp Ile  
                                  325                      330                      335  
 Ala Phe Ala Asp Ser Arg Ile Arg Lys Glu Thr Ile Ala Ala Glu Asp  
                                  340                      345                      350  
 Val Leu Gln Asp Met Gly Val Phe Ser Met Val Ser Ser Asp Ser Gln  
                                  355                      360                      365  
 Ala Met Gly Arg Val Gly Glu Val Val Thr Arg Thr Trp Gln Val Ala  
                                  370                      375                      380  
 His Arg Met Lys Glu Gln Arg Gly Pro Leu Asp Gly Asp Phe Glu Tyr  
 385                                   390                      395                      400  
 His Asp Asn Asn Arg Ile Lys Arg Tyr Ile Ala Lys Tyr Thr Ile Asn  
                                  405                      410                      415  
 Pro Ala Ile Thr His Gly Ile Ser Asp Tyr Val Gly Ser Val Glu Ala  
                                  420                      425                      430  
 Gly Lys Leu Ala Asp Leu Val Met Trp Glu Pro Glu Phe Phe Gly Ala  
                                  435                      440                      445  
 Lys Pro Asp Leu Val Val Lys Gly Gly Met Ile Asn Ser Ala Val Asn  
                                  450                      455                      460  
 Gly Asp Ala Asn Gly Ser Ile Pro Thr Ser Glu Pro Leu Lys Tyr Arg  
 465                                   470                      475                      480  
 Lys Met Tyr Gly Gln Phe Gly Gly Asn Ile Thr His Thr Ala Met Thr  
                                  485                      490                      495  
 Phe Val Ser Asn Thr Ala Tyr Glu Asn Gly Ile Tyr Arg Gln Leu Asn  
                                  500                      505                      510  
 Leu Lys Arg Met Val Arg Pro Val Arg Asn Ile Arg Asn Leu Thr Lys  
                                  515                      520                      525  
 Ala Asp Met Lys Asn Asn Asn Ala Thr Pro Lys Ile Asp Val Asp Pro  
                                  530                      535                      540  
 Gln Thr Tyr Glu Val Phe Val Asp Gly Asn Lys Ile Thr Ser Glu Ala  
 545                                   550                      555                      560  
 Ala Thr Glu Leu Pro Leu Thr Gln Arg Tyr Phe Leu Phe  
                                  565                      570

&lt;210&gt; 6527

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6527

Ser Phe Ile Phe Ser Phe Leu Ile Lys Asn Leu Asn Ala Leu Asn Leu  
 1                      5                      10                      15  
 Ser Ile Glu Ala Phe Arg Ser Glu Cys Ser Ser Tyr Leu Pro Leu Ser  
                                  20                      25                      30  
 Leu Arg Asp Ile Leu Ile Leu Ala Phe Val Lys Arg Gly Phe Thr Phe  
                                  35                      40                      45

Ser Thr Lys  
50

<210> 6528  
<211> 257  
<212> PRT  
<213> S.epidermidis

<400> 6528

Leu Leu Val Ser Gly Lys Asp Thr Met Met Lys Lys Asp Lys Lys Arg  
1 5 10 15  
Gln Ser Tyr Arg Phe Lys Asp Ile Val Trp Arg Asp Phe Ser Leu Ile  
20 25 30  
Ala Ile Gly Phe Leu Cys Ile Phe Ile Phe Ser Phe Ile Gly Leu Thr  
35 40 45  
Ile Ala Ala Ile Ala Phe Gln Ser Ile Asn Glu Leu Gln Leu Thr Met  
50 55 60  
Ile Gly Thr Leu Gly Gln Phe Met Ser Tyr Ile Leu Val Ile Leu Ala  
65 70 75 80  
Phe Tyr Phe Leu His Ile Asn Ser Phe Val Asp Arg Val Lys Ser Gly  
85 90 95  
Phe Asp Tyr Leu Lys Lys His Trp Leu Phe Ile Ile Ile Val Met Cys  
100 105 110  
Ala Ser Phe Ile Ile Ser Asn Val Tyr Asp Lys Leu Ile Glu Leu Leu  
115 120 125  
Pro Lys Tyr Leu Gln Tyr Ser Glu Thr Gln Asn Glu Leu Glu Leu Asn  
130 135 140  
Glu Leu Phe Lys Ser Gly Ile Phe Ile Pro Phe Ala Phe Val Leu Ile  
145 150 155 160  
Val Ile Val Gly Pro Ile Val Glu Glu Leu Val Phe Arg His Leu Leu  
165 170 175  
Ile Gly Glu Leu Gly Lys Lys Phe Asn Phe Ile Val Met Gly Val Ile  
180 185 190  
Ser Ala Leu Ser Phe Thr Tyr Ile His Val Ser Asp Ala Lys Ser Pro  
195 200 205  
Phe Glu Phe Gly Ala Tyr Leu Ile Leu Ala Ile Ala Leu Val Tyr Val  
210 215 220  
Tyr Leu Lys Ser Asn Arg Asn Leu Ala Ser Ser Ile Ser Leu His Met  
225 230 235 240  
Leu Asn Asn Phe Ile Ser Phe Ile Trp Thr Ile Ile Val Val Phe Ser  
245 250 255  
Lys

<210> 6529  
<211> 68  
<212> PRT  
<213> S.epidermidis

<400> 6529

Lys Lys Trp Arg Ser Leu Ile Leu Thr Ile Ile Ile Gly Leu Ile Val  
1 5 10 15  
Ile Ile Leu Leu Ile Ile Ser Leu Leu Pro Asn Tyr Lys Ala Met Val  
20 25 30  
Leu Ala Lys Gln Gln Gly Gln Lys Pro Thr Arg Tyr Thr Ile Met Val  
35 40 45

Gly Ile Asp Leu Leu Leu Ile Ile Leu Ile Ile Val Thr Leu Val Leu  
 50 55 60  
 Lys Leu Ile Met  
 65

<210> 6530  
 <211> 51  
 <212> PRT  
 <213> S.epidermidis

<400> 6530  
 Ile Thr Ile Gly Met Arg Phe His Lys Cys Val Met Leu Leu Ile Ser  
 1 5 10 15  
 Asp Val His Leu Phe His Gly Leu Lys Tyr Leu Leu Tyr Phe Thr Val  
 20 25 30  
 Ile Leu Ile Ile His Leu Asn Glu Asn Asp Val Asp Asp Val Thr Phe  
 35 40 45  
 Lys Pro Phe  
 50

<210> 6531  
 <211> 43  
 <212> PRT  
 <213> S.epidermidis

<400> 6531  
 Phe Ile Tyr Gly Ala Asn Ile Gln Val Ile Thr Leu Ala Ile Met Ala  
 1 5 10 15  
 Leu Ile Pro Thr Phe Gln Phe Thr Ala Asn Ser Pro Ile Lys Met Asn  
 20 25 30  
 Asn Pro Val Tyr Gly Leu Leu Ile Lys Thr Thr  
 35 40

<210> 6532  
 <211> 51  
 <212> PRT  
 <213> S.epidermidis

<400> 6532  
 Ser Ala Phe Gly His Val Ala Phe Val Glu Ser Val Asn Asn Asp Gly  
 1 5 10 15  
 Ser Ile Thr Val Ser Glu Met Asn Cys Asp Gly Gly Pro Phe Ala Ile  
 20 25 30  
 Ser Thr Arg Thr Ile Ser Ala Ser Glu Ala Ser Ser Tyr Asn Tyr Ile  
 35 40 45  
 His Leu Asn  
 50

<210> 6533  
 <211> 42  
 <212> PRT  
 <213> S.epidermidis

<400> 6533  
 Leu Leu Leu Gly Asn Ile Phe Leu Asn His Leu Leu Asn Thr Thr Ile  
 1 5 10 15

Submitted: 09/05/2010



Ile Val Gln Met Asn Asp Met Lys Leu Phe Asn Ile Cys Lys Leu Ile  
                   20                  25                  30  
 Asp Glu Ala Lys Phe Leu Phe Asp Phe Lys  
                   35                  40

<210> 6534  
 <211> 46  
 <212> PRT  
 <213> S.epidermidis

<400> 6534  
 Leu Asn Ser Gly Leu Ile Asn Phe Ser Ile Ala Ser Leu Ile Ala Pro  
 1                  5                  10                  15  
 Val Glu Pro Gly Ser Ala Lys Ile Lys Val Leu Ser Gln Val Pro Ala  
                   20                  25                  30  
 Ile Ala Arg Val Asn Asn Ala Leu Val Pro Thr Ser Ser Val  
                   35                  40                  45

<210> 6535  
 <211> 249  
 <212> PRT  
 <213> S.epidermidis

<400> 6535  
 Ser Tyr Gln Gly Val Glu Leu Ile Gly Ile Ser Ala Gly Glu Thr Lys  
 1                  5                  10                  15  
 Asn Pro Gln Thr Asn Ile Val Lys Ala Val Asn Gly Val Ile Trp Arg  
                   20                  25                  30  
 Ile Leu Ile Phe Tyr Ile Gly Ala Ile Phe Val Ile Val Ser Val Tyr  
                   35                  40                  45  
 Pro Trp Asn Gln Leu Gly Ser Ile Gly Ser Pro Phe Val Ala Thr Phe  
                   50                  55                  60  
 Ala Lys Val Gly Ile Thr Phe Ala Ala Gly Leu Ile Asn Phe Val Val  
 65                  70                  75                  80  
 Leu Thr Ala Ala Leu Ser Gly Cys Asn Ser Gly Ile Phe Ser Ala Ser  
                   85                  90                  95  
 Arg Met Ile Tyr Thr Leu Ala Lys Lys Gly Gln Met Pro Lys Val Phe  
                   100                  105                  110  
 Thr Lys Val Met Lys Asn Gly Val Pro Phe Tyr Thr Val Phe Ala Val  
                   115                  120                  125  
 Ser Met Gly Ile Leu Ile Gly Ala Leu Leu Asn Val Ile Leu Pro Leu  
                   130                  135                  140  
 Ile Ile Asp Gly Ala Asp Ser Ile Phe Val Tyr Val Tyr Ser Ala Ser  
 145                  150                  155                  160  
 Ile Leu Pro Gly Met Ile Pro Trp Phe Met Ile Leu Phe Ser His Leu  
                   165                  170                  175  
 Arg Phe Arg Arg Leu His Pro Glu Lys Val His Asn His Pro Phe Lys  
                   180                  185                  190  
 Met Pro Gly Gly Ala Ile Ala Asn Tyr Leu Thr Ile Met Phe Leu Leu  
                   195                  200                  205  
 Leu Val Leu Val Gly Met Leu Leu Asn Lys Glu Thr Val Val Ser Val  
                   210                  215                  220  
 Val Ile Gly Ile Val Phe Leu Thr Ala Val Thr Leu Tyr Tyr Leu Ile  
 225                  230                  235                  240  
 Arg Tyr His Lys Lys Glu Arg Gln Ile  
                   245

<210> 6536  
 <211> 84  
 <212> PRT  
 <213> S.epidermidis

<400> 6536  
 Ser Lys Lys Gly Glu Ser Lys Met Lys Ile Leu Tyr Phe Ala Glu Leu  
 1 5 10 15  
 Lys Glu Leu Leu Asn Gln Ser Thr Glu Thr Ile His Leu Asp Thr Thr  
 20 25 30  
 Leu Thr Val Gln Glu Phe Glu Ser Tyr Leu Leu Lys His His Ser Glu  
 35 40 45  
 Leu Lys Ser Lys Lys Phe Gln Ile Ala Val Asn Glu Glu Phe Val Arg  
 50 55 60  
 Gln Asp Asp Ile Val Gln Pro Gly Asp Thr Ile Ala Leu Ile Pro Pro  
 65 70 75 80  
 Val Ser Gly Gly

<210> 6537  
 <211> 218  
 <212> PRT  
 <213> S.epidermidis

<400> 6537  
 Ile Leu Lys Gly Asp Asp Asn Met Tyr Lys Ala Val Val Phe Asp Phe  
 1 5 10 15  
 Asp Gly Thr Val Ile Asp Thr Glu Lys His Leu Phe Asp Leu Ile Asn  
 20 25 30  
 Thr His Leu Lys Ile His Gln Val Ala Pro Ile Ser Leu Glu Phe Tyr  
 35 40 45  
 Lys Gln Phe Ile Gly Gly Glu Ala Thr Glu Leu His Thr Tyr Leu Glu  
 50 55 60  
 Asp Ala Ile Gly Phe Lys Asn Lys Glu Lys Ile Tyr Asp Gln Tyr Tyr  
 65 70 75 80  
 Gln Thr Ser Val Glu Leu Pro Val Asn Pro Thr Ile Ile Gln Leu Met  
 85 90 95  
 Gln Tyr Leu Lys Lys Arg His Ile Pro Met Ala Ile Thr Thr Ser Ser  
 100 105 110  
 Tyr Lys Lys Asn Ile Tyr Pro Ile Phe Lys Gln Leu Gly Leu Asp Thr  
 115 120 125  
 Tyr Ile Asp Val Val Val Gly Arg Glu Asn Val Asp Ser Val Gln Pro  
 130 135 140  
 Asn Pro Glu Ile Phe Leu Lys Ala Val Gln Glu Leu Asn Tyr Asn Pro  
 145 150 155 160  
 Thr Asn Cys Leu Ala Ile Glu Asp Ser Val Asn Gly Ala Thr Ala Ala  
 165 170 175  
 Met Leu Ala Gly Leu Asp Val Val Val Asn Thr Asn Ile Ile Thr Lys  
 180 185 190  
 Asn Gln Asp Phe Ser Thr Val Gln Cys Val Gly Gln Asp Met Glu Phe  
 195 200 205  
 Glu Asp Ile Lys Asn Phe Leu Phe Lys Glu  
 210 215

<210> 6538

<211> 125  
 <212> PRT  
 <213> S.epidermidis

<400> 6538

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Ile | Arg | Gly | Lys | Leu | Thr | Met | Thr | Asp | Ala | Ile | Thr | Ala | Pro | Val |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Lys | Val | Asn | Thr | Thr | Gly | Lys | Cys | Lys | Ile | Leu | Val | Lys | Asn | Ser | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Thr | Gly | Leu | Leu | Val | Glu | Asn | Ile | Ile | Asn | Ser | Ile | Lys | Pro | Arg | Thr |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | Gly | Gly | Asn | Thr | Ile | Gly | Lys | Met | Ile | Lys | Leu | Ser | Asn | Arg | Phe |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Thr | Gln | Tyr | Leu | Phe | Leu | Leu | Tyr | Ser | His | Leu | Glu | Ile | Lys | Met | Pro |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Lys | Ile | Val | Thr | Ile | Ile | Val | Leu | Ile | Lys | Ala | Thr | Arg | Lys | Glu | Ile |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gln | Lys | Asp | Val | Lys | Ser | Gly | Ile | Ala | Leu | Asn | Ser | Leu | Tyr | Arg | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Leu | Ile | Phe | Phe | Lys | Asn | Leu | Phe | Ser | Phe | Ile | Gly | Phe |     |     |     |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |

<210> 6539  
 <211> 264  
 <212> PRT  
 <213> S.epidermidis

<400> 6539

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Phe | Ser | Gly | Gly | Tyr | Leu | Thr | Met | Lys | Lys | Ile | Ala | Thr | Ala | Thr | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Thr | Ala | Gly | Ile | Ala | Thr | Phe | Ala | Phe | Ala | His | His | Asp | Ala | Gln |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Ala | Glu | Gln | Asn | Asn | Asp | Gly | Tyr | Asn | Pro | Asn | Asp | Pro | Tyr | Ser |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr | Ser | Tyr | Thr | Tyr | Thr | Ile | Asp | Ala | Glu | Gly | Asn | Tyr | His | Tyr | Thr |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Trp | Lys | Gly | Asn | Trp | Ser | Pro | Asp | Arg | Val | Asn | Thr | Ser | Tyr | Asn | Tyr |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Asn | Asn | Tyr | Asn | Asn | Tyr | Asn | Tyr | Tyr | Gly | Tyr | Asn | Asn | Tyr | Ser | Asn |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Tyr | Asn | Asn | Tyr | Asn | Asn | Tyr | Ser | Asn | Tyr | Asn | Asn | Tyr | Gln | Ser | Asn |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Asn | Thr | Gln | Ser | Gln | Arg | Thr | Thr | Gln | Pro | Thr | Gly | Gly | Leu | Gly | Ala |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ser | Tyr | Ser | Thr | Ser | Ser | Ser | Asn | Val | His | Val | Thr | Thr | Thr | Ser | Ala |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Pro | Ser | Ser | Asn | Gly | Val | Ser | Leu | Ser | Asn | Ala | Arg | Ser | Ala | Ser | Gly |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Asn | Leu | Tyr | Thr | Ser | Gly | Gln | Cys | Thr | Tyr | Tyr | Val | Phe | Asp | Arg | Val |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Gly | Gly | Lys | Ile | Gly | Ser | Thr | Trp | Gly | Asn | Ala | Asn | Asn | Trp | Ala | Asn |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ala | Ala | Ala | Arg | Ser | Gly | Tyr | Thr | Val | Asn | Asn | Ser | Pro | Ala | Lys | Gly |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ala | Ile | Leu | Gln | Thr | Ser | Gln | Gly | Ala | Tyr | Gly | His | Val | Ala | Tyr | Val |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |

Glu Gly Val Asn Ser Asn Gly Ser Ile Arg Val Ser Glu Met Asn Tyr  
 225 230 235 240  
 Gly His Gly Ala Gly Val Val Thr Ser Arg Thr Ile Ser Ala Ser Gln  
 245 250 255  
 Ala Ala Ser Tyr Asn Tyr Ile His  
 260

<210> 6540

<211> 387

<212> PRT

<213> S.epidermidis

<400> 6540

Val Ile Gly Gly Val Asn Val Met Glu Ser Phe Leu Ile His Thr Asp  
 1 5 10 15  
 Ile Gln Lys Lys Trp Ile Arg Lys Phe Lys Lys Ile Glu Ser Glu Phe  
 20 25 30  
 Lys Ala Arg Ala Ala Glu Asn Asp Ile Gln Ser Arg Phe Pro Tyr Glu  
 35 40 45  
 Asn Ile Glu Trp Leu Ile Lys Glu Gly Tyr Thr Lys Leu Thr Leu Pro  
 50 55 60  
 Val Glu Tyr Gly Gly Glu Gly Ala Thr Ile Glu Asp Met Val Ile Leu  
 65 70 75 80  
 Gln Ser Tyr Leu Gly Thr Ile Asp Gly Ala Thr Ala Leu Ser Ile Gly  
 85 90 95  
 Trp His Leu Ser Val Ile Gly Gln Leu Tyr Glu Gln His Met Trp Thr  
 100 105 110  
 Pro Ser Met Leu Asp Ser Phe Ala Lys Glu Val Val His Gly Ala Leu  
 115 120 125  
 Ile Asn Arg Ala Val Ser Glu Ala Glu Thr Gly Ser Pro Thr Arg Gly  
 130 135 140  
 Gly Arg Pro Ser Thr His Ala Val Lys Ala Glu Asn Gly Tyr Val Ile  
 145 150 155 160  
 Asn Gly Val Lys Thr Phe Thr Ser Met Ser Lys Ala Leu Thr His Tyr  
 165 170 175  
 Ile Val Gly Ala Tyr Val Glu Glu Thr Lys Ser Met Gly Phe Phe Leu  
 180 185 190  
 Ile Pro Gln Ser Thr Lys Gly Val Ser Ile Ala Asp Asn Trp Asp Met  
 195 200 205  
 Val Gly Met Arg Ala Thr Glu Ser His Asp Leu Ile Leu Asp Asp Val  
 210 215 220  
 Tyr Val Pro Asn Glu Asn Phe Val Glu Ser Lys Arg Glu Ser Arg Pro  
 225 230 235 240  
 Asn Gly Trp Leu Leu His Ile Pro Ser Cys Tyr Leu Gly Ile Ala Gln  
 245 250 255  
 Ala Ala Arg Asp Tyr Ala Val Asp Phe Ala Lys Asn Tyr Arg Pro Asn  
 260 265 270  
 Ser Ile Thr Gly Thr Ile Asp Ser Leu Pro Thr Val Gln Gln Asn Leu  
 275 280 285  
 Gly Lys Met Glu Ser Leu Leu Leu Ser Ala Arg His Phe Leu Trp Ser  
 290 295 300  
 Thr Ala Arg Gly Tyr Gln Ser Tyr Thr Glu Asp Ala Gln Ile Trp Asn  
 305 310 315 320  
 Glu Thr Ser Ala Ser Lys Val Val Val Met Asn Gln Ser Ile Glu Ile  
 325 330 335  
 Val Asp Leu Ala Met Arg Ile Val Gly Ala Lys Ser Leu Glu Met Ser

340 345 350  
 Arg Pro Leu Gln Arg Tyr Tyr Arg Asp Ile Arg Ala Gly Leu His Asn  
 355 360 365  
 Pro Pro Met Glu Asp Met Ala Tyr Thr Asn Ile Ala Lys Ser Ile Thr  
 370 375 380  
 Asn Lys Leu  
 385

<210> 6541  
 <211> 49  
 <212> PRT  
 <213> S.epidermidis

<400> 6541  
 Ile Leu Ile Ile Ser Ile Phe Phe Tyr Ile Tyr Ile Asp Phe Ser Lys  
 1 5 10 15  
 Tyr Cys Ser Ile Ile Ser Ser Asn Gln Arg Lys Ile Ser Lys Ile Gln  
 20 25 30  
 Ile Leu Phe Ile His Ile Ala Leu Leu Ile Ile Ile Lys Met Asn Phe  
 35 40 45  
 Gln

<210> 6542  
 <211> 151  
 <212> PRT  
 <213> S.epidermidis

<400> 6542  
 Val Met Ile Ile Glu Glu Ile Gln Gly Asn Ile Ala Asn Leu Ser Gln  
 1 5 10 15  
 Asp Glu Lys Gln Lys His Val Glu Lys Val Tyr Leu Glu Asn Ser Asp  
 20 25 30  
 Leu Val Lys Arg Ile Gln Arg Val Lys Thr Asp His Gly Asn Glu Ile  
 35 40 45  
 Gly Ile Arg Leu Lys Gln Pro Ile Asp Leu Gln Tyr Gly Asp Ile Leu  
 50 55 60  
 Tyr Gln Asp Asp Thr Asn Met Ile Ile Val Asp Val Asn Ser Glu Asp  
 65 70 75 80  
 Leu Leu Val Ile Lys Pro Arg Asn Leu Lys Glu Met Gly Asp Ile Ala  
 85 90 95  
 His Gln Leu Gly Asn Arg His Leu Pro Ala Gln Phe Thr Glu Thr Glu  
 100 105 110  
 Met Leu Ile Gln Tyr Asp Tyr Leu Val Glu Asp Leu Leu Lys Glu Leu  
 115 120 125  
 Gly Ile Pro Tyr Ser His Glu Asp Arg Lys Val Asn Gln Ala Phe Arg  
 130 135 140  
 His Ile Gly His Ser His Asp  
 145 150

<210> 6543  
 <211> 46  
 <212> PRT  
 <213> S.epidermidis

<400> 6543

Thr Thr Ser Ile Phe Gln Cys Leu Leu Tyr Asn Ser Arg Lys Ile Ser  
 1 5 10 15  
 Ser Asn Lys Leu Asp Phe Asn Tyr Ile Asn Phe Leu Leu Tyr Leu Tyr  
 20 25 30  
 Arg Phe Leu Lys Ile Leu Leu Asn His Ile Ile Lys Ser Thr  
 35 40 45

<210> 6544

<211> 305

<212> PRT

<213> S.epidermidis

<400> 6544

Met Glu Ala Ile Lys Leu Lys Leu Ile Lys Val Ile Leu Ser Ser Ile  
 1 5 10 15  
 Ser Gln Val Val Leu Ile Asn Asn Pro Tyr Thr Gly Leu Phe Ile Leu  
 20 25 30  
 Ile Gly Leu Phe Ala Val Asn Trp Lys Val Gly Ile Ser Ala Met Ile  
 35 40 45  
 Ala Ser Val Met Thr Trp Ile Leu Ala Pro Tyr Met Asn Tyr Thr Lys  
 50 55 60  
 Glu Glu Ile Glu Ser Gly Leu Ala Gly Phe Asn Pro Val Leu Thr Ala  
 65 70 75 80  
 Ile Ala Leu Thr Leu Phe Leu Asp Ser Asn Trp Ser Gly Ile Leu Ile  
 85 90 95  
 Thr Phe Val Ala Thr Ile Leu Thr Leu Pro Ile Gly Ala Ala Ile Arg  
 100 105 110  
 Glu Val Leu Lys Pro His Lys Ile Ala Phe Leu Thr Ser Pro Tyr Val  
 115 120 125  
 Ile Met Thr Trp Ile Thr Leu Ile Pro Asn Gln Leu Lys Thr Leu  
 130 135 140  
 His Thr Gln Ile Asp Ile Ile Pro Glu His Ile Glu Lys Val Ser Leu  
 145 150 155 160  
 Asn Asn Asp His Thr Ser Val His Phe Phe Gln Ser Val Leu Asp Gly  
 165 170 175  
 Phe Gly Gln Ile Phe Leu Met Pro Ser Ile Ile Gly Gly Leu Leu Ile  
 180 185 190  
 Leu Ile Gly Ile Phe Ile Gly Ser Lys Lys Ala Gly Ile Val Ser Ile  
 195 200 205  
 Ile Ala Asn Ile Ile Gly Phe Leu Ile Ile Ile Leu Leu Gly Gly Asp  
 210 215 220  
 Tyr Ser Ser Ile Asn Glu Gly Ile Phe Gly Tyr Asn Val Val Leu Ser  
 225 230 235 240  
 Ala Ile Ala Leu Gly Val Thr Phe Glu Thr Ala Ile His Ser Tyr Leu  
 245 250 255  
 Ala Met Ile Leu Gly Ile Val Leu Thr Ala Phe Ile His Leu Gly Leu  
 260 265 270  
 Ser Thr Leu Leu Ala Pro Leu Gly Leu Pro Thr Leu Thr Trp Pro Phe  
 275 280 285  
 Ile Phe Ala Thr Trp Ile Met Leu Phe Ala Gly Ile Lys Asn Gln Thr  
 290 295 300  
 Val  
 305

<210> 6545

<211> 660

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6545

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Arg | His | Met | Arg | Glu | Asn | Tyr | Ser | Ile | Arg | Val | Phe | Asn | Asn | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ala | Ile | Asn | Thr | Glu | Asn | Ala | Leu | Ser | Val | Lys | Val | Phe | Tyr | Cys | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Gly | Lys | Cys | Glu | Val | Thr | Ile | Asn | Val | Gln | Lys | His | Ile | Leu | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Lys | Asp | Asp | Ile | Ala | Phe | Val | Val | Met | Asn | Asp | Thr | Tyr | Ser | Leu | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Asn | Thr | Glu | Thr | Met | Cys | Cys | Ile | Ile | Asp | Ile | Pro | Ile | His | Arg |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Tyr | Leu | Ser | Gln | Lys | Asp | Thr | Gln | Phe | Leu | Ile | Ser | Gly | Thr | Lys | Ile |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asp | Glu | Ser | Ser | Arg | Asp | Arg | Ile | Lys | Tyr | Trp | Ile | Leu | Lys | Ile | Leu |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Glu | Leu | His | Cys | Leu | Ser | Tyr | Asn | Asp | Val | Ser | Glu | Ile | Gln | Arg | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ile | Gln | Phe | Leu | Leu | Ile | Glu | Leu | Ser | Tyr | Leu | Lys | Lys | Pro | Lys | Leu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Asp | Val | Asn | Lys | Asp | Phe | Tyr | Leu | Ser | Glu | Asp | Ile | His | Gln | Tyr | Leu |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Val | Asp | His | His | Asp | Ser | Lys | Ile | Asn | Lys | His | Glu | Leu | Ala | Glu | Ala |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Val | Asn | Leu | Ser | Asn | Gln | Ala | Leu | Thr | Ser | Met | Phe | Lys | Gln | Thr | Pro |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Phe | Gln | Thr | Phe | Asn | Gln | Tyr | Leu | Asn | Gln | Leu | Arg | Leu | Lys | Phe | Cys |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Leu | Ile | Asp | Ile | Leu | Thr | Thr | His | Lys | Pro | Ile | Glu | Glu | Ile | Ala | Ile |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Asp | His | Gly | Phe | His | His | Tyr | Ser | Arg | Phe | Ile | Gln | Leu | Phe | Lys | Asn |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Thr | Tyr | Gly | Tyr | Thr | Pro | Lys | Leu | Ile | Arg | Arg | Asp | Tyr | Ile | Ala | Thr |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Ser | Ile | Phe | Lys | Asn | Thr | Ala | Glu | Glu | Ile | Asp | Leu | Asp | Arg | His | Phe |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Leu | Met | Asn | Ile | His | Glu | Leu | Gln | Asp | Leu | Asp | Ser | Lys | Ile | Ile | Ser |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Lys | Lys | Tyr | Ile | Lys | Met | Ser | Asp | Lys | Gly | Lys | Lys | Tyr | Arg | Ser | Tyr |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Asp | Ile | Tyr | Ile | Glu | Asp | Asn | Arg | Ser | Thr | Ile | Leu | Asp | Gln | Glu | Gln |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Ile | Val | His | Ile | Lys | Arg | Asn | Leu | Ser | Leu | Ser | Gln | Lys | Ser | Met | Arg |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Tyr | Val | Ile | Glu | Leu | Asn | Tyr | Thr | Ser | Met | Ile | Glu | Asn | Lys | Glu | Leu |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Cys | Arg | Tyr | Glu | Met | Leu | Lys | Ile | Leu | Arg | Phe | Cys | Ser | Gly | Leu | Asn |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Leu | Ile | Pro | Thr | Phe | Lys | Ile | Thr | Asp | Arg | His | Asp | Thr | Phe | Thr |     |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Ser | Lys | Glu | Lys | Met | Ala | Leu | Lys | Leu | Thr | Phe | Gln | Met | Leu | Phe | Ile |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Met | Leu | Arg | Glu | Phe | Asn | Gln | Leu | Glu | Ile | Glu | Phe | Ile | Val | Glu | Asp |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |

Met Met Leu Lys Gln Val Val Gln Leu Lys Lys Met Ile Ser Ser Tyr  
 420 425 430  
 Phe Glu Tyr Tyr Lys Leu Asn Tyr Arg Ile Lys Asn Glu Lys Ile Gly  
 435 440 445  
 Asn Val Asn Tyr Gln Asn Leu Glu Lys Gln Val Thr Gln Ile Phe Ile  
 450 455 460  
 Pro Ile Asp Gln Leu His Leu Tyr Ile Lys Glu Ile Ser Phe Glu Lys  
 465 470 475 480  
 Val Ile Leu Glu Thr Ser Tyr Leu Thr Asp Leu Lys Ser Glu Ile Val  
 485 490 495  
 Glu Tyr Ser Trp Ile Gln His Ile His Thr Leu Ile Lys Met Ser Gly  
 500 505 510  
 Glu Val Arg Gly Val Leu Ile Gln Pro Ser Tyr Asp Tyr Ala Ala Thr  
 515 520 525  
 Tyr Thr Tyr His Ser Asn Leu Lys Pro Tyr His Ile Leu Ser Tyr Val  
 530 535 540  
 Ile Arg Met Phe Asn Gln Leu Arg Gly Thr Ile Val Tyr Lys Asp Asp  
 545 550 555 560  
 Ala Ile Ile Met Thr Lys Tyr Lys Tyr Glu Tyr Gln Ala Ile Ala Ile  
 565 570 575  
 Phe Leu Lys Asn Arg Ile Lys Glu Asn Val Asn His Gln Gln Leu Ile  
 580 585 590  
 Phe Ser Asp Ile Gln Ser Leu Asn His Ala Glu Tyr Glu Tyr Ile Glu  
 595 600 605  
 Met Met Pro Leu Leu Met Asn Glu Asn Asn Glu Leu Asp Ser His Ile  
 610 615 620  
 Pro Tyr Pro His Gln Tyr Trp Leu Ala Lys Leu Lys Ser Lys Glu Ser  
 625 630 635 640  
 Gln Gln Ala Ile Val Asp Leu Pro Lys Met Ser Ile Ala His Leu Thr  
 645 650 655  
 Phe Leu Cys Ser  
 660

<210> 6546  
 <211> 52  
 <212> PRT  
 <213> S.epidermidis

<400> 6546  
 Phe Trp Ile Phe Thr Arg Met Ser Val Arg Gly Met Asn Lys Ala Lys  
 1 5 10 15  
 Arg Gln Leu Arg Phe Val Leu Met Thr Leu Asn Ile Ile Lys Val Thr  
 20 25 30  
 Thr Gln Arg Ala Glu Asn Asn Gln Lys Ile Ile Lys Lys Thr Ile Ser  
 35 40 45  
 Ile Leu Phe Gln  
 50

<210> 6547  
 <211> 68  
 <212> PRT  
 <213> S.epidermidis

<400> 6547  
 Ser Leu Tyr Ile Arg His Leu Val Lys Leu Val Tyr Trp Tyr Leu Leu  
 1 5 10 15



Asn Tyr Thr Lys Gly Pro Tyr Phe Leu Lys Tyr Phe Asn Ile Lys Leu  
                   20                  25                  30  
 His Ile Ser Thr Lys Tyr Phe Gly Glu Thr Leu Glu Gly Thr Gly Gln  
                   35                  40                  45  
 Ala Glu Asp Tyr Arg Leu Lys Leu Ser Asp Lys Lys Ala Ser Gln Gln  
           50                  55                  60  
 Tyr Glu Val Leu  
 65

<210> 6548

<211> 42

<212> PRT

<213> S.epidermidis

<400> 6548

Ser Leu Tyr Ile Arg His Leu Val Asn Leu Val Tyr Trp Tyr Leu Leu  
 1                  5                  10                  15  
 Asn Tyr Thr Asn Gly Leu Ile Phe Leu Val Phe Gln Cys Lys Ile Ala  
                   20                  25                  30  
 Tyr Lys Asn Lys Val Phe Trp Arg Asp Ser  
           35                  40

<210> 6549

<211> 267

<212> PRT

<213> S.epidermidis

<400> 6549

Gly Gly Asn Ile Val Phe Glu Glu Leu Glu Asn Lys Val Val Leu Ile  
 1                  5                  10                  15  
 Thr Gly Ala Ala Thr Gly Ile Gly Lys Ser Ile Ala Glu Asn Phe Gly  
                   20                  25                  30  
 Lys Ala Lys Ala Lys Val Val Ile Asn Tyr Arg Ser Asp Arg His His  
           35                  40                  45  
 Ser Glu Ile Glu Glu Ile Lys Gln Thr Val Ala Lys Phe Gly Gly Gln  
           50                  55                  60  
 Thr Leu Ala Val Gln Gly Asp Val Ser Ile Glu Glu Asp Ile Lys Arg  
 65                  70                  75                  80  
 Met Ile Glu Thr Thr Ile Asn His Phe Gly Thr Leu Asp Ile Ile Ile  
                   85                  90                  95  
 Asn Asn Ala Gly Phe Glu Asn Ser Ile Pro Thr His Glu Met Ser Ile  
           100                  105                  110  
 Asp Asp Trp Gln Lys Val Ile Asp Ile Asn Leu Thr Gly Ala Phe Val  
           115                  120                  125  
 Gly Ser Arg Glu Thr Ile Asn Gln Phe Leu Lys Glu Asn Lys Lys Gly  
           130                  135                  140  
 Thr Ile Ile Asn Ile Ser Ser Val His Asp Thr Ile Pro Trp Pro Asn  
 145                  150                  155                  160  
 Tyr Val His Tyr Ala Ala Ser Lys Gly Gly Leu Lys Leu Met Met Glu  
                   165                  170                  175  
 Thr Met Ser Met Glu Tyr Ala Gln Tyr Gly Ile Arg Ile Asn Asn Ile  
                   180                  185                  190  
 Ser Pro Gly Ala Ile Val Thr Glu His Thr Lys Glu Lys Phe Ser Asp  
           195                  200                  205  
 Pro Thr Thr Arg Glu Glu Thr Ile Lys Met Ile Pro Ala Arg Glu Ile  
           210                  215                  220

Gly Asn Ala Gln Asp Val Ala Asn Ala Val Leu Phe Leu Ser Ser Asp  
 225 230 235 240  
 Leu Ala Ser Tyr Ile His Gly Thr Thr Leu Tyr Val Asp Gly Gly Met  
 245 250 255  
 Met Asn Tyr Pro Ala Phe Met Gly Gly Lys Gly  
 260 265

<210> 6550  
 <211> 290  
 <212> PRT  
 <213> S.epidermidis

<400> 6550  
 Leu Pro Asn Ile Leu Tyr Lys Ile Asp Asn Gln Tyr Pro Tyr Phe Thr  
 1 5 10 15  
 Lys Asn Glu Lys Lys Ile Ala Gln Phe Ile Leu Asn Tyr Pro His Lys  
 20 25 30  
 Val Val Asn Met Thr Ser Gln Glu Ile Ala Asn Gln Leu Glu Thr Ser  
 35 40 45  
 Ser Thr Ser Ile Ile Arg Leu Ser Lys Lys Val Thr Pro Gly Gly Phe  
 50 55 60  
 Asn Glu Leu Lys Thr Arg Leu Ser Lys Phe Leu Pro Lys Glu Val Thr  
 65 70 75 80  
 Gln Tyr Asn Val Glu Leu Val Asp Asn Glu Ser Thr Ile Ser Leu Lys  
 85 90 95  
 Asn Lys Leu His Ser Arg Ser Lys Ala Leu Ser Asn Ala Asn Glu  
 100 105 110  
 Thr Ile Asn Ala Ala Ile Ile Asp Glu Ile Cys Asp Leu Ile Lys Asn  
 115 120 125  
 Ser Glu Thr Ile Phe Ile Tyr Gly Tyr Gly Ala Ser Phe Val Val Ala  
 130 135 140  
 Thr Asp Leu Tyr Gln Lys Leu Ser Arg Ile Gly Leu Asn Ile Gln Leu  
 145 150 155 160  
 Val His Glu Thr His Ile Phe Thr Thr Met Leu Ala Thr Arg Asn Ser  
 165 170 175  
 Asn Asp Cys Val Ile Phe Ile Ser Asn Asn Gly Thr Gln Ser Glu Met  
 180 185 190  
 Gln Ser Ile Ala Lys Val Ile Ala Asp Tyr His Ile Pro Ile Ala Thr  
 195 200 205  
 Ile Ser Ser Thr Ser Asp Asn Pro Val Ala Lys Gln Ser Asn Ile Val  
 210 215 220  
 Leu Thr Tyr Gly Gln Thr Asp Glu Asn Glu Met Arg Met Gly Ala Thr  
 225 230 235 240  
 Thr Ser Leu Phe Ala Gln Met Phe Thr Ile Asp Ile Leu Tyr Tyr Arg  
 245 250 255  
 Tyr Ile Ala Leu Asn Tyr Gln Ser Ser Leu Asp Phe Ile Thr Gln Ser  
 260 265 270  
 Lys Ile Ala Leu Asp Asn Tyr Arg Lys His Leu Ser Asn Ile Asp Phe  
 275 280 285  
 Lys His  
 290

<210> 6551  
 <211> 232  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6551

Asp Ile Arg Met Ile Asp His Gln His Leu Arg Leu Phe Gln Phe Cys  
 1 5 10 15  
 Asp Ser Gln Phe Pro Thr Gly Ala Phe Ser His Ser Phe Gly Leu Glu  
 20 25 30  
 Thr Tyr Ile Gln Arg Glu Thr Val His Asp Thr Glu Thr Phe Ile Lys  
 35 40 45  
 Trp Leu His Leu Phe Ile Asn Glu Gln Leu Thr Tyr Ser Asp Gly Leu  
 50 55 60  
 Ala Met Arg Ile Val Tyr His Ala Leu Ile Asn Asn Asp Lys Asp Lys  
 65 70 75 80  
 Ile Leu Asp Ile Asn Gln Lys Leu Phe Val Gln Asn Leu Pro Lys Glu  
 85 90 95  
 Thr Arg Ile Gly Ala Lys Gln Met Gly Thr Arg Met Val Lys Leu Ala  
 100 105 110  
 Leu Asp Leu Tyr Asp Ser Glu Trp Ile Gln Trp Tyr Tyr Asn Gln Met  
 115 120 125  
 Lys Asn His Lys Ile Lys Leu His Pro Ala Val Cys Phe Thr Met Leu  
 130 135 140  
 Gly His Phe Leu Gly Val Asp Val Glu Ser Ile Ile Asp Tyr Tyr Leu  
 145 150 155 160  
 Tyr Gln Asn Ile Ser Ser Leu Thr Gln Asn Ala Val Arg Ala Ile Pro  
 165 170 175  
 Leu Gly Gln Thr Ala Gly Gln Gln Val Val Thr Glu Met Ile Ala His  
 180 185 190  
 Ile Glu Lys Thr Arg Asn His Ile Leu Glu Leu Asp Glu Ile Asp Phe  
 195 200 205  
 Gly Met Thr Ala Pro Gly Leu Glu Leu Asn Gln Met Glu His Glu Asn  
 210 215 220  
 Val His Val Arg Ile Phe Ile Ser  
 225 230

&lt;210&gt; 6552

&lt;211&gt; 195

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6552

Asn Ile Ser Ile His Ile Ile Phe Ile His Ile Leu Leu Thr Ile Gly  
 1 5 10 15  
 Gly Pro His Met Leu Ile Asp Lys Phe Glu Thr Tyr Ile Ile Asn Val  
 20 25 30  
 Ala Gly Leu Lys Ser Arg Ser Thr Arg Lys Lys Leu Ile His Leu Cys  
 35 40 45  
 Lys Glu Ile Thr Phe Cys Glu Ser Phe Gln Tyr Ser Ile Ile Lys Gln  
 50 55 60  
 Asn Asn Val Phe Ala Leu Glu Val Ser Leu Pro Lys Leu Gln Leu Pro  
 65 70 75 80  
 Tyr Leu Ile Ser Phe Leu Ser Phe His Asn Tyr Ala Ile Tyr Gln Ile  
 85 90 95  
 Leu Leu Pro Asn Arg Val Asn Glu Leu Leu Asp Ser Glu Gln Leu Tyr  
 100 105 110  
 Gln Ser Ile Lys Arg Phe Asp Leu Ala Ile Asp Gly Leu Gln Asp Ala  
 115 120 125  
 Phe Ile Lys Asp Lys Val Ile Asp Ile Met Asn Met Phe Ala Asn His

|                         |                     |                     |     |     |
|-------------------------|---------------------|---------------------|-----|-----|
| 130                     |                     | 135                 |     | 140 |
| His Asn Val Asn Tyr Thr | Leu Asn Asn Asn Cys | Ala Ser Val Thr Cys |     |     |
| 145                     | 150                 | 155                 | 160 |     |
| Pro Pro Glu Ile Phe Thr | Lys Leu Leu Gln Thr | Ile Ala Thr Arg Asn |     |     |
|                         | 165                 | 170                 | 175 |     |
| Ile Asp Ile Leu Ser Ala | Ser Tyr Arg Ala Lys | Met Leu His Lys Ala |     |     |
|                         | 180                 | 185                 | 190 |     |
| Arg Ile Ser             |                     |                     |     |     |
| 195                     |                     |                     |     |     |

<210> 6553  
 <211> 45  
 <212> PRT  
 <213> S.epidermidis

|   |
|---|
| <400> 6553  |
| Cys Asn Ile Ile Leu Lys Asn Leu Ala Lys Met Phe Lys Thr Lys Ile |
| 1 5 10 15   |
| Arg Glu Tyr Leu Thr Gln Pro Ser Leu Ile Cys Lys Lys Pro Arg Thr |
| 20 25 30  |
| Phe Arg Ser Arg Phe Leu Thr Gln Ala Leu His Tyr Met             |
| 35 40 45  |

<210> 6554  
 <211> 61  
 <212> PRT  
 <213> S.epidermidis

|   |
|---|
| <400> 6554  |
| Val Ser Ile Ile Ile Leu Pro Lys Ser Phe Phe Tyr Ile Leu Asn Phe |
| 1 5 10 15   |
| Leu Val Ile Leu Phe Phe Lys Val Asn Lys Ile Ser Tyr Ile Thr Gly |
| 20 25 30  |
| Thr Thr Lys Ser Val Ser Ser Val Glu Glu Ile Asn Pro Pro Ile Thr |
| 35 40 45  |
| Val Ala Ala Ile Pro Phe Glu Ile Asn Ile Glu Leu Ser             |
| 50 55 60  |

<210> 6555  
 <211> 58  
 <212> PRT  
 <213> S.epidermidis

|   |
|---|
| <400> 6555  |
| Leu Lys Ile Met Asn Ile Tyr Leu Ile Phe Leu Leu Leu Met Leu Thr |
| 1 5 10 15   |
| Leu Asn Phe His Ser Ile Val Lys Glu Ile Phe Lys Asn Ser Lys Gly |
| 20 25 30  |
| Val Tyr Ala Tyr Glu Tyr Ser Phe Lys Pro Lys Lys Pro Glu Thr Ser |
| 35 40 45  |
| Phe Ile Val Pro Ser Phe Leu Ser Tyr Ser                         |
| 50 55   |

<210> 6556  
 <211> 206  
 <212> PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6556

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Met Leu Thr Ile Lys Val Asn Gly Val Leu Tyr Gln Thr Lys Ile Asn
1      5      10      15
Ile Asn Ile Glu Asp Gln His Pro Lys Ile Tyr Ala Ile Gln Gly Pro
      20      25      30
Ser Gly Ile Gly Lys Thr Thr Ile Leu Asn Ile Ile Ala Gly Leu Lys
      35      40      45
Ser Ile Asn Tyr Ser Tyr Ile Lys Val Gly Lys Arg Val Leu Thr Asp
      50      55      60
Ser Gln His His Leu Asn Val Lys Val Gln Gln Arg Arg Ile Gly Tyr
      65      70      75      80
Leu Phe Gln Asp Tyr Gln Leu Phe Pro Asn Met Asn Val Tyr Asn Asn
      85      90      95
Ile Thr Phe Met Thr Lys Pro Ser Glu His Ile Asn Glu Leu Ile His
      100     105     110
Thr Leu Lys Ile Glu His Leu Leu Glu Lys Tyr Pro Val Thr Leu Ser
      115     120     125
Gly Gly Glu Ala Gln Arg Val Ala Leu Ala Arg Ala Leu Ser Thr Lys
      130     135     140
Pro Asp Leu Ile Leu Leu Asp Glu Pro Phe Ser Ser Leu Asp Asp Lys
      145     150     155     160
Thr Lys Lys Glu Gly Ile Lys Leu Ile Leu Lys Ile Phe Glu Ala Trp
      165     170     175
Gln Ile Pro Ile Ile Phe Val Thr His Ser Asn Tyr Glu Ala Gln Gln
      180     185     190
Met Ala His Glu Ile Ile Thr Ile Glu Asp Cys Ile Gln Ile
      195     200     205

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&lt;210&gt; 6557

&lt;211&gt; 229

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (167), (168), (169), (170), (171), (172), (173)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 6557

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Val Ala Thr Ile Ser Ser Ala Arg Ile Cys Pro Lys Leu Ser Ser Lys
1      5      10      15
Leu Thr Leu Ile Phe Phe Thr Ser Thr Cys Cys Phe Ile Ile Arg Leu
      20      25      30
Ile Ala Ser Leu Thr Asp Ile Gly Val Leu Phe Ser Ile Asp Ile His
      35      40      45
Ser Ser Pro Lys Asn Ile Asn Phe His Asp Ile Leu Thr Pro Asn Arg
      50      55      60
Arg Glu Lys Met Thr His Phe Thr His Ile Asn Lys Gln Gly Asn Ala
      65      70      75      80
Lys Met Val Asp Val Ser Asn Lys Glu Ile Thr Lys Arg Val Ala Glu
      85      90      95
Ala His Ser Ser Ile Ile Val Asn Glu Lys Ile Tyr Arg Gln Ile Thr
      100     105     110
Gln Asn Thr Asn Ser Lys Gly Asn Val Leu Asn Thr Ala Gln Ile Ala

```

115 120 125  
 Gly Ile Met Ala Ala Lys Asn Thr Ser Thr Ile Ile Pro Met Cys His  
 130 135 140  
 Pro Leu Pro Leu Thr Gly Ile Asp Ile Ser Phe Lys Trp Asp Ser Asn  
 145 150 155 160  
 Asn Asp Asp Ser Tyr Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ser Thr Thr  
 165 170 175  
 Gly Lys Thr Gly Val Glu Met Glu Ala Leu Thr Ala Ala Ser Val Thr  
 180 185 190  
 Ala Leu Thr Ile Tyr Asp Met Thr Lys Ala Ile Asp Lys Gly Met Ile  
 195 200 205  
 Ile Gly Glu Thr Tyr Leu Glu Ser Lys Ser Gly Gly Lys Ser Gly Asp  
 210 215 220  
 Phe His Arg Lys Asn  
 225

<210> 6558  
 <211> 132  
 <212> PRT  
 <213> S.epidermidis

<400> 6558  
 Leu Asp Lys Ile Ile Lys Val Leu Tyr Leu Tyr Thr Ser Leu Asn Ser  
 1 5 10 15  
 Phe Asn Ile Lys Phe Ala Arg Gln Ile Asn Met Lys Glu Gly Ile Val  
 20 25 30  
 Leu His Phe Thr Gln Arg Glu Gln Asp Lys Leu Met Ile Val Val Ala  
 35 40 45  
 Ala Glu Val Ala Arg Arg Arg Lys Ala Arg Gly Leu Lys Leu Asn His  
 50 55 60  
 Pro Glu Ala Leu Ala Leu Ile Ser Asp Glu Leu Leu Glu Gly Ala Arg  
 65 70 75 80  
 Asp Gly Lys Thr Val Ala Glu Leu Met Ser Tyr Gly Lys Thr Ile Leu  
 85 90 95  
 Asn Glu Glu Asp Val Met Asp Gly Val Ala Asn Met Ile Thr Glu Leu  
 100 105 110  
 Glu Ile Glu Ala Thr Phe Pro Asp Gly Thr Lys Leu Ile Thr Val His  
 115 120 125  
 His Pro Ile Val  
 130

<210> 6559  
 <211> 375  
 <212> PRT  
 <213> S.epidermidis

<400> 6559  
 Asn Met Lys Ile Ala Ile Val Gly Ala Gly Ile Gly Gly Leu Thr Ala  
 1 5 10 15  
 Ala Ala Leu Leu Glu Glu Gln Gly His Gln Val Lys Val Phe Glu Lys  
 20 25 30  
 Asn Thr Ser Ile Asn Glu Leu Ser Ala Gly Ile Gly Ile Gly Asp Asn  
 35 40 45  
 Val Leu Lys Lys Leu Gly His His Asp Leu Ala Lys Gly Ile Lys Asn  
 50 55 60  
 Ala Gly Gln Asn Leu Thr Ala Met Asn Ile Tyr Asp Glu Gln Gly Thr

```

65          70          75          80
Pro Leu Met Ser Ala Lys Leu Lys Ser His Ser Leu Asn Val Ala Leu
      85          90          95
Ser Arg Gln Thr Leu Ile Glu Ile Ile Gln Ser Tyr Val Glu Glu Ser
      100         105         110
Ser Ile His Thr Gly Phe Lys Val Thr Lys Ile Glu Gln Thr Ser Cys
      115         120         125
Lys Val Thr Leu His Phe Thr Lys Gln Glu Ser Glu Ser Phe Asp Leu
      130         135         140
Cys Ile Gly Ala Asp Gly Leu His Ser Val Val Arg Glu Ser Val Gly
      145         150         155         160
Ala Arg Thr Lys Ile Arg Tyr Asn Gly Tyr Thr Cys Phe Arg Gly Met
      165         170         175
Val Glu Asp Val Gln Phe Asn Asp Gln His Val Ala Asn Glu Tyr Trp
      180         185         190
Gly Val Lys Gly Arg Val Gly Ile Val Pro Leu Ile Asn Gln Arg Ala
      195         200         205
Tyr Trp Phe Ile Thr Val His Ala Lys Glu Gly Asp Pro Lys Tyr Gln
      210         215         220
Ser Phe Gly Lys Pro His Leu Gln Ala Tyr Phe Asn His Phe Pro Asn
      225         230         235         240
Glu Val Arg Asn Val Leu Glu Arg Gln Ser Glu Thr Gly Ile Leu Leu
      245         250         255
His Asp Ile Tyr Asp Leu Lys Pro Leu Lys Thr Phe Val Tyr Gly Arg
      260         265         270
Thr Ile Leu Met Gly Asp Ala Ala His Ala Thr Thr Pro Asn Met Gly
      275         280         285
Gln Gly Ala Ser Gln Ala Met Glu Asp Ala Ile Val Leu Val Asn Cys
      290         295         300
Leu Glu Lys Tyr Asp Phe Asn Lys Ala Ile Glu Arg Tyr Asp Lys Leu
      305         310         315         320
Arg Val Lys His Thr Thr Lys Val Ile Arg Arg Ser Lys Lys Ile Gly
      325         330         335
Lys Met Ala Gln Lys His His Lys Leu Thr Val Lys Leu Arg Asn Thr
      340         345         350
Ala Met Lys Leu Ile Pro Asn Ala Leu Ala Ser Ala Gln Thr Lys Phe
      355         360         365
Leu Tyr Lys Ser Lys Glu Lys
      370         375

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&lt;210&gt; 6560

&lt;211&gt; 307

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6560

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Lys Glu Gly Ile Asn Val Thr Glu Gln Phe Val Ile Ile Ile Leu Leu
1          5          10          15
Ile Ala Leu Gly Tyr Phe Leu Lys Arg Met Asn Tyr Leu Lys Ala Thr
      20         25         30
Asp Ser Gln Val Leu Ser Thr Leu Val Leu Asn Val Thr Leu Pro Ser
      35         40         45
Leu Val Ile Val Asn Leu Asn Ser Ala Lys Leu Asp Val Ser Phe Ser
      50         55         60
Ile Leu Pro Ile Met Met Ile Ile Tyr Gly Ile Val Ala Lys Ile Ile
65          70          75          80

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Ala Tyr Ile Glu His Val Asn Tyr Asn Phe Leu Glu Gln His Gly Met
 50          55          60
His Val Asp Ile Ile Leu Asp Ala Thr Asp Asn Phe Asp Thr Arg Gln
65          70          75          80
Leu Ile Asn Asp Phe Ala Tyr Lys His Gln Ile Pro Trp Ile Tyr Gly
          85          90          95
Gly Val Val Gln Ser Thr Tyr Val Gln Ala Thr Phe Ile Pro Gly Glu
          100          105          110
Thr Pro Cys Phe Asn Cys Leu Met Pro Gln Leu Pro Ser Ile Asn Leu
          115          120          125
Thr Cys Asp Thr Val Gly Val Ile Gln Pro Ala Val Thr Met Thr Thr
          130          135          140
Ser Leu Gln Leu Val Asp Ala Leu Lys Leu Leu Thr Gly Asn Lys Val
145          150          155          160
Asn Lys His Phe Thr Tyr Gly Asp Ile Trp Thr Gly Asp His Tyr Thr
          165          170          175
Phe Gly Phe Ser Arg Met Gln Asn Glu Asp Cys Lys Thr Cys Gly Asn
          180          185          190
Ala Pro Thr Tyr Pro His Leu Asn Gln His Gln Gln Asp Tyr Ala Thr
          195          200          205
Leu Cys Gly Arg Asp Thr Val Gln Tyr Lys Asn Ala Asp Ile Ser Gln
210          215          220
Glu Ile Leu Leu Ser Phe Leu Glu Arg Asn His Ile Gln Tyr Arg Thr
225          230          235          240
Asn Leu Tyr Met Thr Met Phe Arg Phe Arg Glu His Arg Ile Val Ala
          245          250          255
Phe Ser Gly Gly Arg Phe Leu Ile His Gly Thr Thr Glu Pro Lys Lys
          260          265          270
Ala Ile Gln Leu Met His Gln Leu Phe Gly
          275          280

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&lt;210&gt; 6563

&lt;211&gt; 362

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6563

```

Leu Ala Met Ile Arg Tyr Gln Glu Gly Val Phe Lys Met Leu Gly Phe
1          5          10          15
Ser Val Tyr Leu Gly Gln Asn Leu Asp Arg Asp Tyr Ile Leu Asn Met
          20          25          30
Ala Asp Leu Gly Tyr Asp Val Val Phe Thr Ser Leu Gln Ile Pro Glu
          35          40          45
Glu Asp Lys Lys Asn Gln Met Ala Tyr Leu Gly Asp Leu Cys Gln Leu
50          55          60
Leu Ser Ala Tyr Gln Ile Thr Tyr Ile Ile Asp Val Thr Pro Ser Leu
65          70          75          80
Leu Asn Gln Thr Ile Tyr Ser Tyr Leu Asn Gln Leu Pro His Gly Asp
          85          90          95
Phe Tyr Ile Arg Ile Asp Asn Gln Leu Asn Ile Asp Leu Ile Lys Asp
          100          105          110
Ile Ile Ser His Gly Phe Lys Cys Cys Leu Asn Ala Ser Thr Leu Thr
          115          120          125
Asp Ser Met Leu Ala His Ile Tyr Cys Thr Asp Phe Asn Asn Gln Leu
130          135          140
Leu Tyr Cys His Asn Tyr Tyr Pro Arg Pro Asp Thr Gly Leu Ser Ile

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145                      150                      155                      160  
 Ser Phe Ile Glu Glu Lys Asn Gln Leu Ile Arg Lys Tyr Asp Ala His  
                                  165                      170                      175  
 Ala Lys Ile Cys Ala Phe Ile Pro Gly Thr Gln Lys Arg Gly Pro Leu  
                                  180                      185                      190  
 Phe Lys Gly Leu Pro Thr Val Glu Lys His Arg Phe Glu His Pro Leu  
                                  195                      200                      205  
 Ile Ala Ala Gln Asp Leu Gln Leu Thr Gly Ile Ser Asp Ile Ile Ile  
                                  210                      215                      220  
 Ser Asp Thr Leu Leu Ser His Ile Tyr Ala Glu Gln Leu Ser Asn Met  
 225                      230                      235                      240  
 Trp Leu Tyr Arg His Phe Ile Leu His Leu Asp Gln Leu Asp Ser Ser  
                                  245                      250                      255  
 Phe Thr Ser Gln Val Leu Lys Ile His Thr Ser Arg Leu Asp Ser Pro  
                                  260                      265                      270  
 Glu His Val Ile Arg Ser Gln Tyr Ser Arg Thr Asp Asn Gln Gln Thr  
                                  275                      280                      285  
 Val Pro Met Ile Gly Ser Ala His Arg Asp Gln Gly Asp Ile Thr Ile  
                                  290                      295                      300  
 Asp Asn His Leu Asn Gly Arg Tyr Glu Gly Glu Ile Gln Val Ile Lys  
 305                      310                      315                      320  
 Ala Pro Met Pro Gly His Ser His Ile Asn Cys Ile Gly His Val Cys  
                                  325                      330                      335  
 Asp Lys Asp Val Pro Leu Leu Ser Leu Ile Gln Pro Gly Asp Thr Phe  
                                  340                      345                      350  
 Lys Phe Val Tyr Thr Lys Glu Asn Asn Lys  
                                  355                      360

<210> 6564

<211> 256

<212> PRT

<213> S.epidermidis

<400> 6564

Gly Val Lys Met Ile Leu Asp Glu Arg Val Asn Ser Asn Phe Asp Gln  
 1                      5                      10                      15  
 Leu Asn Asp Asn Asp Ile Gln Ile Ala His Tyr Val Asn Thr His Ile  
                                  20                      25                      30  
 Asp Val Cys Lys Asn Met Lys Ile Gln Asp Leu Ala Ser Gln Thr His  
                                  35                      40                      45  
 Ala Ser Asn Ala Thr Ile His Arg Phe Thr Arg Lys Leu Gly Phe Asp  
                                  50                      55                      60  
 Gly Tyr Ser Asp Phe Lys Ser Phe Leu Lys Phe Glu Asp Ser Lys Asn  
 65                      70                      75                      80  
 His Gln Leu Pro Ser Asp Ser Met Glu Gln Phe Lys Gln Glu Ile Glu  
                                  85                      90                      95  
 Asn Thr Phe Asn Tyr Leu Glu Arg Ile Asp Tyr Arg Leu Leu Thr His  
                                  100                      105                      110  
 Lys Met His His Ala Thr Thr Ile Tyr Leu Tyr Gly Thr Gly Arg Ala  
                                  115                      120                      125  
 Gln Met Asn Val Ala Glu Glu Ala Gln Arg Ile Leu Leu Thr Met His  
                                  130                      135                      140  
 Lys Asn Ile Ile Leu Leu His Asp Val His Glu Leu Lys Met Val Leu  
 145                      150                      155                      160  
 Asn Lys Thr Ile Pro Glu Asp Leu Phe Phe Ile Ile Ser Leu Ser Gly  
                                  165                      170                      175

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Thr | His | Gln | Leu | Lys | Glu | Val | Thr | Gln | Leu | Leu | Gln | Leu | Arg | Gln |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Lys | Tyr | Phe | Ile | Ser | Val | Thr | Thr | Met | Lys | Asp | Asn | Thr | Leu | Ala | Gln |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Gln | Ala | Asp | Tyr | Asn | Val | Tyr | Val | Ser | Ser | Asn | Thr | Phe | Tyr | Leu | Asn |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Asp | Gly | Thr | Asp | Tyr | Ser | Ser | Phe | Ile | Ser | Tyr | His | Ile | Phe | Phe | Glu |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Thr | Leu | Leu | Arg | Lys | Tyr | Asn | Glu | Tyr | Lys | Glu | Asn | His | Glu | Leu | Thr |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     |     | 255 |

&lt;210&gt; 6565

&lt;211&gt; 287

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6565

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Gln | Ile | Val | Asp | Phe | Leu | Ile | Ala | Leu | Leu | Pro | Ala | Leu | Phe | Trp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Gly | Ser | Val | Val | Ile | Ile | Asn | Val | Phe | Val | Gly | Gly | Gly | Pro | Tyr | Asn |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gln | Ile | Arg | Gly | Thr | Thr | Leu | Gly | Thr | Leu | Phe | Ile | Gly | Phe | Ser | Leu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Leu | Ala | Thr | Gly | His | Ala | Ala | Phe | Asp | Asn | Leu | Thr | Val | Ile | Ile | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Gly | Leu | Val | Ser | Gly | Ala | Leu | Trp | Ala | Phe | Gly | Gln | Gly | Asn | Gln | Leu |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Lys | Ser | Val | His | Leu | Ile | Gly | Val | Ser | Lys | Thr | Met | Pro | Ile | Ser | Thr |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Gly | Met | Gln | Leu | Val | Gly | Thr | Thr | Leu | Phe | Ser | Ala | Ile | Phe | Leu | Gly |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Glu | Trp | Ser | Thr | Ile | Val | Gln | Val | Met | Gly | Leu | Ile | Ala | Met | Ile |     |
|     |     | 115 |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Leu | Leu | Val | Val | Gly | Ile | Ser | Leu | Thr | Ser | Leu | Lys | Ala | Lys | Ser | Glu |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Gly | Lys | Ser | Asp | Asn | Pro | Glu | Phe | Lys | Lys | Ala | Met | Gly | Ile | Leu | Leu |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Leu | Ser | Thr | Ile | Gly | Tyr | Val | Gly | Tyr | Val | Val | Leu | Gly | Asp | Ile | Phe |
|     |     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Gly | Val | Ser | Gly | Thr | Asp | Ala | Leu | Phe | Phe | Gln | Ser | Ile | Gly | Met | Ala |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Ile | Gly | Gly | Leu | Ile | Leu | Ser | Met | Asn | His | Asn | Thr | Ser | Ile | Lys | Ser |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Thr | Ala | Leu | Asn | Leu | Ile | Pro | Gly | Val | Ile | Trp | Gly | Ile | Gly | Asn | Leu |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Phe | Met | Phe | Tyr | Ser | Gln | Pro | Lys | Val | Gly | Val | Ala | Thr | Ser | Phe | Ser |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Leu | Ser | Gln | Leu | Leu | Val | Ile | Val | Ser | Thr | Leu | Gly | Gly | Ile | Phe | Ile |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Leu | Gly | Glu | Lys | Lys | Asp | Arg | Arg | Gln | Met | Ile | Gly | Ile | Trp | Ser | Gly |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Ile | Ile | Val | Ile | Val | Ile | Ala | Ser | Ile | Ile | Leu | Gly | Asn | Leu | Lys |     |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |

&lt;210&gt; 6566

&lt;211&gt; 42

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6566

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tyr | Phe | Asn | Val | Lys | Leu | His | Ile | Lys | Thr | Lys | Tyr | Phe | Gly | Glu | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Glu | Gly | Thr | Gly | Gln | Ala | Glu | Asp | Tyr | Arg | Leu | Lys | Leu | Ser | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Lys | Ala | Ser | Gln | Gln | Tyr | Glu | Val | Leu |     |     |     |     |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |

&lt;210&gt; 6567

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6567

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Lys | Thr | Val | Ala | Thr | Ile | Asn | Leu | Lys | Ile | Ile | Thr | Met | Tyr | Gln |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Arg | Leu | Thr | Gln | Phe | Ser | Asn | Phe | Asn | Ile | Phe | Thr | Leu | Phe | Met |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| His | Tyr | Leu | Tyr | Ser | Leu | Ile | Phe | Asn | Ser | Cys | Lys | Gln | His | Asn | Pro |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Cys | Ser | Lys | Asn | Lys | Trp | Pro | Cys |     |     |     |     |     |     |     |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     |     |     |     |     |     |

&lt;210&gt; 6568

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6568

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Lys | Gly | Val | Glu | Arg | Met | Ile | Leu | Asp | Asn | Val | Asn | Pro | Asp | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Phe | Pro | Thr | Glu | Lys | Lys | Gly | Pro | Ser | Val | Leu | Gly | Met | Ile | Glu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Tyr | Asn | Val | Gln | Gly | Gln | Thr | Lys | Phe | Glu | Gly | Ala | Phe | Ile | Ala | Thr |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Asn | Glu | Arg | Leu | Ile | Met | Asn | Val | Asp | Met | Asn | Gly | Gln | Phe | Tyr | Tyr |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Arg | Asn | Ile | Arg | Tyr | Asp | Glu | Ile | Asn | Gln | Ile | His | Phe | Asp | Gly | Ser |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Asp | Ile | Ile | Phe | Glu | Phe | Asn | Ile | Gly | Thr | Val | Pro | Met | Arg | Glu | Ile |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Lys | Thr | Glu | Asp | Val | Gln | Ala | Phe | Val | Asp | Tyr | Ile | Lys | Gln | Gln | Ile |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     |     | 110 |     |     |

Gln

&lt;210&gt; 6569

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6569

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Phe | Leu | Val | Ser | Pro | Ala | Glu | Met | Pro | Ile | Asn | Ser | Thr | Pro | Trp |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   |     | 5   |     | 10  |     | 15  |     |     |     |     |     |     |     |     |     |
| Tyr | Asp | Gln | Ile | Thr | Ile | Asp | Lys | Ala | Lys | Lys | Asn | Pro | Met | Asn | Pro |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Phe | Gly | Ile | Asn | Pro | Pro | Cys | Asp | His | Lys | Leu | Glu | Ile | Pro | Ile | Gly |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Phe | Pro | Pro | Leu | Pro | Ile | Pro | Asn | Lys | Ile | Asn | Arg | Asn | Pro | Ala | Ile |
|     |     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ile | Ile | Asn | Thr | Ile | Val | Thr | Thr | Leu | Ile | Lys | Ala | Asn | Gln | Asn | Ser |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |
| Asn | Ser | Pro | Asn | Ala | Phe | Thr | Glu | Thr | Arg | Leu | Ala | Ala | Ile | Lys | Lys |
|     |     |     | 85  |     |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Arg | Thr | Ala | Ile | Thr | Pro | Gly | Ile | Gln | Leu | Gly | Arg | Leu | Gly | Asn | Gln |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |

&lt;210&gt; 6570

&lt;211&gt; 80

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6570

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Gly | Val | Val | Gly | Met | Gln | Arg | Ser | Asp | Lys | Arg | Lys | Met | Ser | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Pro | Met | Lys | Ile | Leu | Leu | Trp | Val | Val | Gly | Ile | Leu | Phe | Leu | Leu | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ile | Ile | Ala | Val | Ile | Tyr | Val | Ser | Ala | Lys | Ile | Phe | Ile | Thr | Gly | Asp |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Lys | Ile | His | Asn | Pro | Leu | Asn | Arg | Asn | His | Ser | Glu | Leu | Arg | Ser | Gly |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Lys | Val | Asn | Leu | Lys | Met | Val | Ile | His | Leu | Leu | His | Phe | Leu | Ala |     |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |

&lt;210&gt; 6571

&lt;211&gt; 428

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6571

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Leu | Ile | Phe | Phe | Gly | Asp | Glu | Cys | Met | Ser | Ile | Glu | Lys | Arg | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     | 15  |     |     |
| Pro | Ile | Ser | Val | Lys | Glu | Ala | Ile | Lys | Arg | Ile | Met | Lys | Gln | Gln | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu | Val | Lys | Asn | Ile | Asn | Val | Asn | Leu | Asp | Glu | Ser | Leu | Gly | His | Ile |
|     |     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Leu | Ala | Glu | Asp | Ile | Val | Ala | Thr | Tyr | Asp | Ile | Pro | Arg | Phe | Asn | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ser | Pro | Tyr | Asp | Gly | Phe | Ala | Ile | Arg | Ser | Glu | Asp | Ser | Gln | Gly | Ala |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Ser | Gly | Glu | Asn | Arg | Ile | Glu | Phe | Glu | Val | Ile | Asp | His | Ile | Gly | Ala |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Gly | Ser | Val | Ser | Glu | Lys | Thr | Ile | Asp | Lys | Asn | Gln | Ala | Ile | Arg | Ile |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Met | Thr | Gly | Ala | Gln | Ile | Pro | Ser | Gly | Ala | Asp | Ala | Val | Val | Met | Phe |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Glu | Gln | Thr | Ile | Glu | Ser | Glu | Thr | Thr | Phe | Thr | Ile | Arg | Lys | Ser | Phe |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Lys | His | Leu | Glu | Asn | Ile | Ser | Leu | Gln | Gly | Glu | Glu | Ile | Lys | Ala | Gly |



|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Ala | Thr | Asp | Ala | Gly | Arg | Glu | Gly | Glu | Leu | Val | Ala | Arg | Leu | Ile |
|     | 115 |     |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Leu | Asp | Arg | Val | Gly | Asn | Lys | Lys | Pro | Ile | Lys | Arg | Leu | Trp | Ile | Ser |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ser | Val | Thr | Lys | Lys | Ala | Ile | Gln | Glu | Gly | Phe | Lys | Arg | Leu | Lys | Asn |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gly | Asn | Ala | Tyr | Gln | Asn | Leu | Tyr | Glu | Ala | Ala | Leu | Ala | Arg | Ser | Glu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Ala | Asp | Trp | Ile | Val | Gly | Ile | Asn | Ala | Thr | Arg | Ala | Leu | Thr | Thr | Lys |
|     | 180 |     |     |     |     |     | 185 |     |     |     |     |     | 190 |     |     |
| Tyr | Asp | Ala | Gln | Leu | Ser | Leu | Gly | Arg | Val | Gln | Thr | Pro | Thr | Ile | Gln |
|     | 195 |     |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Leu | Val | Lys | Ser | Arg | Gln | Asp | Glu | Ile | Asn | Tyr | Phe | Lys | Pro | Glu | Lys |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Tyr | Tyr | Thr | Leu | Ser | Ile | Asn | Val | Asp | Gly | Tyr | Asp | Leu | Lys | Leu | Asn |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Gln | Gln | Lys | Arg | Tyr | Lys | Asp | Lys | Lys | Glu | Leu | Glu | Leu | Ile | Glu | His |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Glu | Ile | Lys | His | Gln | Glu | Gly | Lys | Ile | Leu | Glu | Val | Lys | Gly | Lys | Asn |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Lys | Lys | Ser | Tyr | Ala | Gln | Pro | Leu | Phe | Asn | Leu | Thr | Asp | Leu | Gln | Gln |
|     | 275 |     |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Glu | Ala | Tyr | Lys | Arg | Tyr | Lys | Met | Gly | Pro | Lys | Glu | Thr | Leu | Asn | Thr |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Leu | Gln | His | Leu | Tyr | Glu | Arg | His | Lys | Leu | Val | Thr | Tyr | Pro | Arg | Thr |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Asp | Ser | Asn | Tyr | Leu | Thr | Asp | Asp | Met | Val | Asp | Thr | Ile | Gln | Glu | Arg |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Leu | Arg | Ala | Ile | Leu | Ala | Thr | Asp | Tyr | Lys | Ser | His | Val | Arg | Asp | Leu |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Ile | Ser | Lys | Ser | Phe | Ser | Ser | Lys | Met | His | Ile | Phe | Asn | Asn | Gln | Lys |
|     | 355 |     |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Val | Ser | Asp | His | His | Ala | Ile | Ile | Pro | Thr | Glu | Val | Arg | Pro | Ser | Ile |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Glu | Gln | Leu | Ser | Gln | Arg | Glu | Phe | Lys | Ile | Tyr | Met | Leu | Ile | Ala | Glu |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Arg | Phe | Leu | Glu | Asn | Leu | Met | Asn | Pro | Tyr | Leu | Tyr | Glu | Val | Leu | Thr |
|     |     |     |     | 405 |     |     |     |     | 410 |     |     |     |     | 415 |     |
| Ile | His | Ala | Gln | Leu | Lys | Asp | Tyr | His | Phe | Val | Leu | Lys | Glu | Lys | Ile |
|     |     |     | 420 |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Pro | Lys | Gln | Leu | Gly | Tyr | Lys | Ala | Leu | Lys | Asp | Gln | Leu | Ser | Ser | His |
|     | 435 |     |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Thr | Leu | Thr | His | Ser | Phe | Lys | Glu | Gly | Gln | Leu | Phe | Lys | Val | His | Arg |
|     | 450 |     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |
| Ile | Glu | Ile | His | Glu | His | Glu | Thr | Lys | Ala | Pro | Glu | Tyr | Phe | Asn | Glu |
| 465 |     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |
| Gly | Ser | Leu | Leu | Lys | Ala | Met | Glu | Asn | Pro | Gln | Asn | His | Ile | Asp | Leu |
|     |     |     |     | 485 |     |     |     |     | 490 |     |     |     |     | 495 |     |
| Asn | Asp | Lys | Lys | Tyr | Ala | Lys | Thr | Leu | Lys | His | Thr | Gly | Gly | Ile | Gly |
|     |     | 500 |     |     |     |     |     | 505 |     |     |     | 510 |     |     |     |
| Thr | Val | Ala | Thr | Arg | Ala | Asp | Ile | Ile | Glu | Lys | Leu | Phe | Asn | Met | Asn |
|     | 515 |     |     |     |     |     | 520 |     |     |     |     | 525 |     |     |     |
| Ala | Leu | Glu | Ser | Arg | Asp | Gly | Lys | Ile | Lys | Val | Thr | Ser | Lys | Gly | Lys |
|     | 530 |     |     |     |     | 535 |     |     |     |     | 540 |     |     |     |     |
| Gln | Ile | Leu | Glu | Leu | Ser | Pro | Ser | Glu | Leu | Thr | Ser | Pro | Ile | Leu | Thr |
| 545 |     |     |     |     | 550 |     |     |     |     | 555 |     |     |     |     | 560 |

Ala Gln Trp Glu Glu Lys Leu Met Leu Ile Glu Lys Gly Lys Tyr Asn  
                   565                  570                  575  
 Ser Gln Lys Phe Ile Gln Glu Met Lys Asn Phe Thr Phe Lys Val Val  
                   580                  585                  590  
 Asn Lys Ile Lys Ser Ser Glu Gln Lys Tyr Lys His Asp Asn Leu Thr  
                   595                  600                  605  
 Thr Thr Glu Cys Pro Thr Cys Gly Lys Phe Met Ile Lys Val Lys Thr  
                   610                  615                  620  
 Lys Asn Gly Gln Met Leu Val Cys Gln Asp Pro Lys Cys Lys Thr Lys  
                   625                  630                  635                  640  
 Lys Asn Ile Gln Arg Lys Thr Asn Ala Arg Cys Pro Asn Cys Lys Lys  
                   645                  650                  655  
 Lys Met Thr Leu Phe Gly Lys Gly Lys Glu Ala Val Tyr Arg Cys Val  
                   660                  665                  670  
 Cys Gly His Thr Glu Thr Gln Ser Gln Met Asp Lys Arg Met Arg Asp  
                   675                  680                  685  
 Lys Thr Asn Gly Lys Val Ser Arg Lys Glu Met Lys Lys Tyr Ile Asn  
                   690                  695                  700  
 Lys Lys Glu Glu Ile Asp Asn Asn Pro Phe Lys Asp Ala Leu Lys Asn  
                   705                  710                  715                  720  
 Leu Lys Leu

<210> 6573  
 <211> 43  
 <212> PRT  
 <213> S.epidermidis

<400> 6573  
 Gln Ile Val Phe Ile Asn Arg Val Arg Ile Glu Phe Asn Asp Met Met  
 1                  5                  10                  15  
 Thr His Phe Pro Met Leu Ile His Asp Ser Leu Tyr Ile Arg Tyr Ile  
                   20                  25                  30  
 Phe Leu Val Val Phe Gln Arg Lys Cys Asp Ser  
                   35                  40

<210> 6574  
 <211> 138  
 <212> PRT  
 <213> S.epidermidis

<400> 6574  
 Ile Leu Gln Phe Leu Glu Ala Leu Asn Ile Met Lys Lys Ile Lys Thr  
 1                  5                  10                  15  
 Ile Ser Thr Leu Val Ala Gly Leu Gly Ile Ala Phe Leu Gly His Thr  
                   20                  25                  30  
 Thr His Ala Asp Ala Ala Glu Asn Asn Gln Gln Gln Ser Thr Tyr  
                   35                  40                  45  
 Asn Tyr Ser Thr Thr Glu Val Ser Phe Ser Asn Ser Gly Asn Leu Tyr  
                   50                  55                  60  
 Thr Ser Gly Gln Cys Thr Trp Tyr Val Tyr Asp Lys Thr Gly Gly Lys  
 65                  70                  75                  80  
 Ile Gly Ser Thr Trp Gly Asn Ala Asn Ser Trp Ala Thr Ala Ala Gln  
                   85                  90                  95  
 Ala Ala Gly Phe Thr Val Asn Asn Thr Pro Glu Glu Gly Ala Ile Met  
                   100                  105                  110



Gln Ser Ser Glu Val Leu Ser Asp Met Leu Leu Ser Leu Lys Val Leu  
           115                  120                  125  
 Ile Met Met Val Leu Leu Leu Tyr Gln Lys  
           130                  135

<210> 6575  
 <211> 150  
 <212> PRT  
 <213> S.epidermidis

<400> 6575  
 Met Lys Gln Phe Glu Ile Val Thr Gln Pro Ile Glu Thr Glu Gln Tyr  
 1                  5                  10                  15  
 Arg Asp Phe Thr Ile Asn Glu Arg Gln Gly Ala Val Val Val Phe Thr  
           20                  25                  30  
 Gly His Val Arg Glu Trp Thr Lys Gly Ile Arg Thr Gln His Leu Glu  
           35                  40                  45  
 Tyr Glu Ala Tyr Ile Pro Met Ala Glu Lys Lys Leu Ala Gln Ile Gly  
           50                  55                  60  
 Lys Glu Ile Glu Glu Lys Trp Pro Gly Thr Ile Thr Thr Ile Val His  
 65                  70                  75                  80  
 Arg Ile Gly Pro Leu Gln Ile Ser Asp Ile Ala Val Leu Ile Ala Val  
           85                  90                  95  
 Ser Ser Pro His Arg Lys Ala Ala Tyr Ala Ala Asn Glu Tyr Ala Ile  
           100                  105                  110  
 Glu Arg Ile Lys Glu Ile Val Pro Ile Trp Lys Lys Glu Ile Trp Asp  
           115                  120                  125  
 Asp Gly Ser Glu Trp Gln Gly His Gln Lys Gly Thr Tyr Asn Glu Ala  
           130                  135                  140  
 Lys Lys Gly Lys Ala Arg  
 145                  150

<210> 6576  
 <211> 484  
 <212> PRT  
 <213> S.epidermidis

<400> 6576  
 Gln Leu Lys Phe Lys Lys Arg Gly Phe Val Ser Asn His Thr Glu Gly  
 1                  5                  10                  15  
 Ser Lys Ser Met Thr Gln Lys Tyr Arg Tyr Pro Thr Phe Leu Glu Ser  
           20                  25                  30  
 Ile Ser Thr Ile Leu Val Met Val Val Val Val Val Ile Gly Phe Val  
           35                  40                  45  
 Phe Phe Asn Ile Pro Ile Gln Ile Leu Leu Leu Ile Ser Ser Ala Tyr  
           50                  55                  60  
 Ala Ala Phe Ile Ala His Arg Val Gly Leu Lys Trp Lys Asp Leu Glu  
 65                  70                  75                  80  
 Glu Gly Ile Thr His Arg Leu Ser Thr Ala Met Pro Ala Ile Phe Ile  
           85                  90                  95  
 Ile Leu Ala Val Gly Ile Ile Val Gly Ser Trp Met Tyr Ser Gly Thr  
           100                  105                  110  
 Val Pro Ala Leu Ile Tyr Tyr Gly Leu Lys Phe Leu Asn Pro Ser Tyr  
           115                  120                  125  
 Leu Leu Val Ser Ala Phe Ile Ile Ser Ala Met Thr Ser Ile Ala Thr  
           130                  135                  140

Gly Thr Ala Trp Gly Ser Ala Ser Thr Ala Gly Ile Ala Leu Ile Ser  
 145 150 155 160  
 Ile Ala Asn Gln Leu Gly Val Pro Ala Gly Met Ala Ala Gly Ala Ile  
 165 170 175  
 Ile Ala Gly Ala Val Phe Gly Asp Lys Met Ser Pro Leu Ser Asp Thr  
 180 185 190  
 Thr Asn Leu Ala Ala Leu Val Thr Lys Val Asn Ile Phe Ala His Ile  
 195 200 205  
 Lys Ser Met Met Trp Thr Thr Ile Pro Ala Ser Ile Ile Gly Leu Ala  
 210 215 220  
 Ile Trp Phe Ile Val Gly Leu Gln Phe Lys Gly Asp Ala Asn Thr Gln  
 225 230 235 240  
 Gln Ile Gln Asn Leu Leu Lys Glu Leu Thr Thr Ile Tyr Asn Leu Asn  
 245 250 255  
 Phe Trp Val Trp Ile Pro Leu Ile Ile Ile Ile Leu Cys Leu Ile Phe  
 260 265 270  
 Arg Ile Ser Thr Val Pro Ser Met Leu Ile Ser Ser Ile Ser Ala Leu  
 275 280 285  
 Val Ile Gly Thr Phe Asp His Gln Phe Asn Met Lys Asp Gly Phe Lys  
 290 295 300  
 Ala Ser Phe Asp Gly Phe Asn His Thr Met Leu His Gln Ser His Ile  
 305 310 315 320  
 Ser Asp Asn Ala Lys Thr Leu Ile Glu Gln Gly Gly Met Met Ser Met  
 325 330 335  
 Thr Gln Ile Ile Val Thr Ile Phe Cys Gly Tyr Ala Phe Ala Gly Ile  
 340 345 350  
 Val Glu Lys Ala Gly Cys Leu Asp Val Ile Leu Glu Thr Ile Ala Lys  
 355 360 365  
 Gly Val Lys Ser Val Gly Thr Leu Ile Leu Ile Thr Val Val Cys Ser  
 370 375 380  
 Ile Met Leu Val Phe Ala Ala Gly Val Ala Ser Ile Val Ile Ile Met  
 385 390 395 400  
 Val Gly Val Leu Met Lys Asp Met Phe Glu Lys Met Asn Val Ser Lys  
 405 410 415  
 Ser Val Leu Ser Arg Thr Leu Glu Asp Ser Ser Thr Met Val Leu Pro  
 420 425 430  
 Leu Ile Pro Trp Gly Thr Ser Gly Ile Tyr Tyr Ala His Gln Leu Asn  
 435 440 445  
 Val Ser Val Asp Gln Phe Phe Ile Trp Ala Ile Pro Cys Tyr Leu Cys  
 450 455 460  
 Ala Phe Ile Ala Ile Ile Tyr Gly Phe Thr Gly Ile Gly Ile Lys Lys  
 465 470 475 480  
 Ile Ser Arg Lys

&lt;210&gt; 6577

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6577

Pro Cys Ser Ser Asn Asn Ala Ala Ala Val Lys Pro Pro Ile Pro Ala  
 1 5 10 15  
 Pro Thr Ile Ala Ile Phe Met Phe Tyr Thr Ser Asn Leu Ser Phe Phe  
 20 25 30  
 Ile Ile Leu Ala Tyr Thr His Met Leu Lys Ser Lys Pro Phe Tyr Phe

35  
Asn Cys Gln  
50

40

45

<210> 6578  
<211> 43  
<212> PRT  
<213> S.epidermidis

<400> 6578  
Glu Leu Tyr Ser Leu Asn Leu Pro Tyr Phe Thr Ser Ile Gln Leu Glu  
1 5 10 15  
Lys Asp Leu Ile Ile Thr Ala Ile Gly Phe Ile Gly Glu Asn His Phe  
20 25 30  
Asn Ile Tyr Ser His Pro Lys Arg Ile Thr Asn  
35 40

<210> 6579  
<211> 86  
<212> PRT  
<213> S.epidermidis

<400> 6579  
Phe Val Tyr Ser Lys Tyr Lys Glu Arg Phe Arg Asp Leu Met Gln Glu  
1 5 10 15  
Arg Tyr Ser Arg Gln Val Leu Phe Lys Glu Ile Gly Leu Lys Gly Gln  
20 25 30  
Ser Leu Leu Glu Lys Lys His Val Leu Ile Val Ser Met Gly Ala Leu  
35 40 45  
Gly Thr His Leu Ala Glu Gly Leu Val Arg Ala Gly Ile Asn Lys Leu  
50 55 60  
Thr Ile Val Asp Arg Asp Tyr Ile Glu Phe Ser Asn Leu Gln Arg Gln  
65 70 75 80  
Thr Leu Phe Tyr Arg Ala  
85

<210> 6580  
<211> 478  
<212> PRT  
<213> S.epidermidis

<400> 6580  
Gly Gly Asp Ser Met Ser Lys Glu Glu Arg Leu Ala Lys Asp Ile Thr  
1 5 10 15  
His Ala Leu Gly Gly Ser Gln Asn Ile Ser Asn Ile Ile His Cys Met  
20 25 30  
Thr Arg Val Arg Ile Lys Val His Asn Asp Ala Lys Val Asn Tyr Asp  
35 40 45  
Glu Leu Lys Ser Ile Asn Gly Val Leu Gly Val Val Glu Asp Glu Arg  
50 55 60  
Ile Gln Val Val Val Gly Pro Gly Ile Val Asn Lys Val Ala Lys Leu  
65 70 75 80  
Met Ala Asp Gln Ser Gly Ala Thr Leu Ala Glu Glu Thr Thr Glu Asn  
85 90 95  
Gln Ser Tyr Lys Ser Gln Ala Glu Lys Arg Ala Tyr Glu His Lys Lys  
100 105 110

Gln Phe Gln Ser Gln Arg Lys Gln Ser Lys Trp Asn Lys Val Leu Lys  
           115                  120          125  
 Ser Ile Ala Asn Ile Phe Ile Pro Leu Ile Pro Ala Phe Ile Gly Ala  
           130                  135          140  
 Gly Leu Ile Gly Gly Ile Ala Ala Ile Leu Ser Asn Leu Leu Thr Ala  
 145                  150          155          160  
 Gly Ser Ile Ser Gly Gln Trp Ile Gln Gln Ile Val Thr Val Leu Asn  
                   165          170          175  
 Val Ile Lys Asp Gly Met Leu Phe Tyr Leu Ala Ile Phe Thr Gly Ile  
                   180          185          190  
 Asn Ser Ala Lys Val Phe Gly Ala Thr Pro Gly Leu Gly Gly Val Ile  
           195                  200          205  
 Gly Gly Thr Thr Leu Leu Thr Gly Ile Thr Asp Glu Asn Pro Ile Lys  
 210                  215          220  
 Asn Ile Phe Thr Gly Glu His Leu Ala Ala Gly Gln Gly Gly Ile Ile  
 225                  230          235          240  
 Gly Val Ile Phe Ala Val Trp Leu Leu Ser Met Val Glu Lys Arg Leu  
                   245          250          255  
 His Lys Ile Ile Pro Asn Ser Ile Asp Ile Ile Val Thr Pro Thr Ile  
                   260          265          270  
 Thr Leu Leu Leu Ile Gly Leu Leu Thr Ile Phe Ile Ile Met Pro Leu  
           275                  280          285  
 Ala Gly Phe Val Ser Asp Gly Leu Val Tyr Val Ile Asn Trp Ile Ile  
           290                  295          300  
 Gly Val Gly Gly Ile Phe Ser Gly Phe Ile Ile Gly Ala Phe Phe Leu  
 305                  310          315          320  
 Pro Leu Val Met Leu Gly Leu His His Ile Phe Thr Pro Ile His Ile  
                   325          330          335  
 Glu Leu Ile Asn Gln Thr Gly Ser Thr Tyr Leu Leu Pro Ile Ala Ala  
                   340          345          350  
 Met Ala Gly Ala Gly Gln Val Gly Ala Ala Ile Ala Leu Trp Val Arg  
           355                  360          365  
 Cys Gly Lys Asn Lys Glu Leu Arg Asn Thr Leu Lys Gly Ala Leu Pro  
 370                  375          380  
 Val Gly Phe Leu Gly Ile Gly Glu Pro Leu Ile Tyr Gly Val Thr Leu  
 385                  390          395          400  
 Pro Leu Gly Arg Pro Phe Phe Thr Ala Cys Ile Gly Gly Gly Val Gly  
                   405          410          415  
 Gly Ala Val Ile Gly Gly Ile Gly His Ile Gly Ala Thr Ala Val Gly  
           420                  425          430  
 Pro Ser Gly Ile Ser Leu Leu Pro Leu Ile Ala Asn Asn Met Tyr Leu  
           435                  440          445  
 Gly Tyr Ile Val Gly Leu Leu Ala Ala Tyr Thr Gly Gly Phe Ile Phe  
 450                  455          460  
 Thr Tyr Phe Phe Gly Thr Lys Glu Met Arg Asn Pro Glu  
 465                  470          475

&lt;210&gt; 6581

&lt;211&gt; 51

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6581

Tyr Val Phe Ser Leu Gln Thr Tyr Ser Phe Phe Leu Ile Leu His Tyr  
 1                  5          10          15  
 Ile Ser Val Leu Ser Leu Ile Leu Leu Lys Glu His Leu Leu Glu Tyr



245 250 255  
 Gly Pro Gln Asp Ser Tyr Leu Leu Ile Arg Gly Ile Lys Thr Leu Gly  
 260 265 270  
 Leu Arg Met Glu Gln Ile Asn Arg Asn Val Glu Gly Ile Val Gln Met  
 275 280 285  
 Leu Gln Lys His Pro Lys Val Gln Gln Val Phe His Pro Ser Ile Lys  
 290 295 300  
 Glu His Met Asn Tyr Thr Ile His Gln Asn Gln Ala Thr Gly His Thr  
 305 310 315 320  
 Gly Val Val Ser Phe Glu Val Lys Asp Thr Glu Ala Ala Lys Gln Val  
 325 330 335  
 Ile His Ala Thr Asn Tyr Phe Thr Leu Ala Glu Ser Leu Gly Ala Val  
 340 345 350  
 Glu Ser Leu Ile Ser Val Pro Ala Leu Met Thr His Ala Ser Ile Pro  
 355 360 365  
 Ser Asp Val Arg Ala Lys Glu Gly Ile Thr Asp Gly Leu Ile Arg Leu  
 370 375 380  
 Ser Ile Gly Ile Glu Asp Thr Glu Asp Leu Val Asn Asp Leu Glu Gln  
 385 390 395 400  
 Ala Leu Asn Thr Leu Arg  
 405

<210> 6584  
 <211> 84  
 <212> PRT  
 <213> S.epidermidis

<400> 6584  
 Ile Tyr Gln Ser Pro Val Ala Ile Tyr Asn Lys Met Thr Ala Ile Asn  
 1 5 10 15  
 Asn Asp Asn His Ala Asn Ile Asn Asp Gln Ala Glu Ile Leu Ala Ala  
 20 25 30  
 Ser Leu Gly Thr Phe His Asn Leu Leu Thr Leu Met Ser Arg Val Asn  
 35 40 45  
 Thr Asn Asn Val Ala Pro Gln Asn Met Val Ile Asn Leu Lys Ser Pro  
 50 55 60  
 Leu Asn His Ala Asn Glu Ala Asn Ala Val Ile Asn Val Lys Asn Gly  
 65 70 75 80  
 Lys Tyr Leu Arg

<210> 6585  
 <211> 81  
 <212> PRT  
 <213> S.epidermidis

<400> 6585  
 Thr Ala Arg Ser Ser Lys Ser His Lys Val Val Leu Ser Ser Asp Cys  
 1 5 10 15  
 Ser Leu Gln Leu Asp Tyr Met Lys Leu Glu Ser Leu Val Ile Val Asp  
 20 25 30  
 Gln His Ala Thr Val Asn Thr Phe Pro Gly Leu Val His Thr Ala Arg  
 35 40 45  
 His Thr Thr Arg Val Cys Asn Thr Arg Ser Arg Trp Ser Asn His Leu  
 50 55 60  
 Glu Leu Ala Val Glu Gly Gly Thr Asn Asp Trp Gly Glu Val Val Thr

65  
Arg

70

75

80

<210> 6586  
<211> 312  
<212> PRT  
<213> S.epidermidis

<400> 6586

Tyr Ser Leu Leu Ser Ser Glu Pro Lys Ile Met Ile Ala Tyr Asp Leu  
1 5 10 15  
Ile Gly Gln Thr Pro Leu Val Leu Leu Glu Ser Phe Ser Asp Glu Asn  
20 25 30  
Val Lys Ile Tyr Ala Lys Leu Glu Gln Phe Asn Pro Gly Gly Ser Ile  
35 40 45  
Lys Asp Arg Leu Gly Lys Tyr Leu Ile Glu Lys Ala Ile Asp Glu Gly  
50 55 60  
Arg Leu Lys Glu Gly Asp Thr Ile Val Glu Ala Thr Ala Gly Asn Thr  
65 70 75 80  
Gly Ile Gly Leu Ala Ile Ala Ser Asn Arg His Lys Val Lys Cys Ile  
85 90 95  
Ile Phe Ala Pro Glu Gly Phe Ala Glu Glu Lys Ile Ser Ile Met Lys  
100 105 110  
Ala Leu Gly Ala Asp Val Arg Arg Thr Pro Lys Ala Glu Gly Met Thr  
115 120 125  
Gly Ala Gln Gln Glu Ala Leu Ala Tyr Ala Thr Arg Tyr Gly Tyr Leu  
130 135 140  
Tyr Met Asn Gln Phe Glu Thr Lys Asp Asn Pro Gly Ala Tyr Thr Gln  
145 150 155 160  
Thr Leu Ala Lys Gln Leu Thr Asp Glu Leu Ser His Ile Asp Tyr Phe  
165 170 175  
Val Ala Gly Val Gly Ser Gly Gly Thr Phe Thr Gly Val Ala Gln His  
180 185 190  
Leu Lys Thr Tyr Asp Val Lys Asn Tyr Ile Val Glu Pro Glu Gly Ser  
195 200 205  
Val Leu Asn Gly Gly Val Ser His Pro His Ala Thr Glu Gly Ile Gly  
210 215 220  
Ser Glu Lys Trp Pro Ser Phe Leu Glu Lys Glu Leu Val Asp Gly Ile  
225 230 235 240  
Phe Thr Val Ala Asp Lys Asp Ala Phe Asn Asn Val Lys Leu Val Ala  
245 250 255  
Asn Lys Glu Gly Leu Leu Val Gly Ser Ser Ser Gly Ala Ala Leu Gln  
260 265 270  
Gly Ala Leu Glu Leu Lys Lys Ser Ile Gln Asn Gly Val Ile Val Thr  
275 280 285  
Ile Phe Pro Asp Gly Ser Asp Arg Tyr Met Ser Lys Gln Ile Phe Asn  
290 295 300  
Tyr Lys Glu Ser Phe Asn Asn Glu  
305 310

<210> 6587  
<211> 274  
<212> PRT  
<213> S.epidermidis

&lt;400&gt; 6587

Cys Met Asp Pro Tyr Lys Val Leu Ile Glu Val Met Lys Thr Glu Ser  
 1 5 10 15  
 Phe Thr Arg Ala Ala Glu Asn Leu Tyr Thr Ser Gln Pro Ser Val Ser  
 20 25 30  
 Arg Asp Ile Lys Arg Leu Glu Leu Lys Tyr Asn Val Lys Ile Phe Glu  
 35 40 45  
 Phe Lys Ser Pro Tyr Leu Lys Leu Thr Arg Asp Gly Glu Lys Leu Leu  
 50 55 60  
 Gln Tyr Ala Leu Gln Arg Glu Ser Ile Glu Gln Glu Leu Trp Gln Asn  
 65 70 75 80  
 Leu Thr Ser Glu Ser Glu Ile Ile Ser Gly Thr Leu Thr Ile Gly Ser  
 85 90 95  
 Ser Tyr Thr Tyr Gly Glu Tyr Leu Leu Ser Glu Gln Leu Thr Ser Leu  
 100 105 110  
 Met Gln Gln Tyr Pro Lys Leu His Ile His Leu Arg Val Asn Asn Ser  
 115 120 125  
 Asp Ser Val Ile Asn Asp Ile Lys His Asn Arg Val Asp Ile Gly Ile  
 130 135 140  
 Val Glu Lys Glu Ile Gln Asp Asn Ala Ile Lys Cys Lys Glu Ile Met  
 145 150 155 160  
 Glu Asp Glu Met Val Tyr Ile Tyr Lys Lys Ser Ile Gln Pro Arg Met  
 165 170 175  
 Asp Ile Cys Phe Val Arg Glu Lys Gly Ser Gly Thr Arg Phe Tyr Gln  
 180 185 190  
 Glu Val Gly Leu Ser Glu Leu Lys Leu Asn Pro Tyr Leu Ile Glu Ile  
 195 200 205  
 Asn Asn Ile Lys Ile Ile Lys Gln Met Val Glu Ala Gly Asn Gly Phe  
 210 215 220  
 Ala Ile Ile Ser Lys Ser Ala Leu His Pro Glu Asp Tyr Glu Lys Leu  
 225 230 235 240  
 Met Ile Thr Thr Leu Asn Val Lys Arg His Tyr Tyr Leu Ala Gln His  
 245 250 255  
 Val Asp Lys Tyr Ile Gly Glu Asn Ile Arg Ala Val Ile Glu Met Ile  
 260 265 270  
 Met Lys

&lt;210&gt; 6588

&lt;211&gt; 42

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6588

Asn Leu Ser Leu Lys Asn Val Asn Ile Asn Val Pro Lys Asn Arg Gln  
 1 5 10 15  
 Leu Lys Ile Ile Ile Ile Gln Val Lys Gly Val Leu Lys Lys Phe Leu  
 20 25 30  
 Asp Cys Ile Leu Lys Pro Gln Phe Ser Thr  
 35 40

&lt;210&gt; 6589

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis



&lt;400&gt; 6589

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Arg Leu Pro Pro Thr Tyr Tyr Arg Gly Cys Trp His Val Val Ser Arg
1          5          10          15
Gly Phe Leu Ile Arg Tyr Arg Gln Asp Val His Ser Tyr Leu His Ile
          20          25          30
Cys Ser Ser Leu Ile Thr Glu Phe Tyr Asp Pro Lys Thr Phe Ile Thr
          35          40          45
His Ala Ala Leu Leu Arg Gln Ala Phe Ala His Cys Gly Arg Phe Pro
          50          55          60
Thr Ala Ala Ser Arg Arg Ser Leu Asp Arg Val Ser Val Pro Val Trp
65          70          75          80
Pro Ile Thr Leu Ser Gly Arg Leu Arg Ile Val Ala Leu Val Ser Arg
          85          90          95
Tyr Leu Thr Asn
          100

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&lt;210&gt; 6590

&lt;211&gt; 184

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6590

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Gly Ala Ala Leu Ile Met Thr Lys Gln Asp Leu Ser Leu Ser Val Phe
1          5          10          15
Thr Asn Glu Asn Tyr Lys Asn Leu His Tyr Thr Ser Ser Ser Phe Arg
          20          25          30
Asn Ser Met Tyr Asp Glu Leu Glu Val Asn Lys Ser Arg Phe Lys Asn
          35          40          45
Cys Asn Phe Asn Glu Gly Ile Phe Lys Asn Ile Glu Ala Ile Cys Asn
          50          55          60
Cys Lys Phe Thr Thr Cys Gly Phe Asn Asn Cys Ile Phe Glu Asp Val
65          70          75          80
His Phe Tyr Lys Asn Gln Phe Lys Asp Ser Thr Phe Val Asn Thr Pro
          85          90          95
Phe Asp Gln Ser Val Phe Asn Ser Thr Leu Phe Gln Asn Ala Met Phe
          100          105          110
Asp Ser Asn Leu Ile Arg Ser Val Lys Trp Thr Asp Ile Ile Phe Lys
          115          120          125
Asn Val Ser Phe Lys Asn Val Glu Ile Glu Gly Thr Thr Phe Lys Asp
          130          135          140
Val Lys Phe Lys Asn Cys Glu Phe Lys Asn Val Ile Ile Thr Asn Ser
145          150          155          160
Thr Met Ser Gln Lys Leu Met Asn Glu Leu Gln Lys Gln Asp Val Thr
          165          170          175
Leu Glu Asn Ile Asp Thr Ser Ile
          180

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&lt;210&gt; 6591

&lt;211&gt; 40

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6591

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Ile Lys Lys Pro Val Asn Glu Phe Met Lys Thr His Leu Leu Ser Ile
1          5          10          15
Leu Ile Gly Ile Met Ser Gln Ala Leu Tyr Pro Thr Ile Ser Gln Val

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|                     |     |     |     |     |     |       |     |     |     |     |     |     |     |     |     |
|---------------------|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|                     |     |     | 20  |     |     |       |     | 25  |     |     |     |     | 30  |     |     |
| Leu                 | Ile | Ile | Lys | Ile | Ser | Ile   | Thr |     |     |     |     |     |     |     |     |
|                     |     | 35  |     |     |     |       | 40  |     |     |     |     |     |     |     |     |
| <210> 6592          |     |     |     |     |     |       |     |     |     |     |     |     |     |     |     |
| <211> 410           |     |     |     |     |     |       |     |     |     |     |     |     |     |     |     |
| <212> PRT           |     |     |     |     |     |       |     |     |     |     |     |     |     |     |     |
| <213> S.epidermidis |     |     |     |     |     |       |     |     |     |     |     |     |     |     |     |
| <400> 6592          |     |     |     |     |     |       |     |     |     |     |     |     |     |     |     |
| Leu                 | Leu | Phe | Thr | Lys | Glu | Arg   | Val | Leu | Glu | Met | Ala | Lys | Ile | Pro | Val |
| 1                   |     |     |     | 5   |     |       |     |     | 10  |     |     |     |     | 15  |     |
| Thr                 | Val | Leu | Ser | Gly | Tyr | Leu   | Gly | Ser | Gly | Lys | Thr | Thr | Leu | Leu | Asn |
|                     |     |     | 20  |     |     |       |     | 25  |     |     |     |     | 30  |     |     |
| His                 | Ile | Leu | Lys | Asn | Arg | Glu   | Gly | Arg | Arg | Ile | Ala | Val | Ile | Val | Asn |
|                     |     | 35  |     |     |     |       | 40  |     |     |     |     | 45  |     |     |     |
| Asp                 | Met | Ser | Glu | Val | Asn | Ile   | Asp | Lys | Asp | Leu | Val | Ala | Gln | Gly | Gly |
|                     | 50  |     |     |     |     | 55    |     |     |     |     | 60  |     |     |     |     |
| Gly                 | Leu | Ser | Arg | Thr | Asp | Glu   | Lys | Leu | Val | Glu | Leu | Ser | Asn | Gly | Cys |
| 65                  |     |     |     |     | 70  |       |     |     |     | 75  |     |     |     | 80  |     |
| Ile                 | Cys | Cys | Thr | Leu | Arg | Asp   | Asp | Leu | Leu | Arg | Glu | Val | Glu | Arg | Leu |
|                     |     |     |     | 85  |     |       |     |     | 90  |     |     |     |     | 95  |     |
| Val                 | His | Lys | Gly | Gly | Ile | Asp   | Gln | Ile | Val | Ile | Glu | Ser | Thr | Gly | Ile |
|                     |     |     | 100 |     |     |       |     | 105 |     |     |     |     | 110 |     |     |
| Ser                 | Glu | Pro | Val | Pro | Val | Ala   | Gln | Thr | Phe | Ser | Tyr | Ile | Asp | Glu | Glu |
|                     |     | 115 |     |     |     |       | 120 |     |     |     |     | 125 |     |     |     |
| Leu                 | Gly | Ile | Asp | Leu | Thr | Ser   | Ile | Cys | Arg | Leu | Asp | Thr | Met | Val | Thr |
|                     | 130 |     |     |     |     | 135   |     |     |     |     | 140 |     |     |     |     |
| Val                 | Val | Asp | Ala | Asn | Arg | Phe   | Val | Asn | Asp | Ile | Arg | Ser | Glu | Asp | Leu |
| 145                 |     |     |     |     | 150 |       |     |     |     | 155 |     |     |     |     | 160 |
| Leu                 | Ala | Asp | Arg | Asp | Glu | Ser   | Val | Asp | Asp | Glu | Asp | Glu | Arg | Thr | Ile |
|                     |     |     |     | 165 |     |       |     |     | 170 |     |     |     |     | 175 |     |
| Ala                 | Asp | Leu | Leu | Ile | Asp | Gln   | Val | Glu | Phe | Cys | Asp | Val | Met | Ile | Ile |
|                     |     |     | 180 |     |     |       |     | 185 |     |     |     |     | 190 |     |     |
| Asn                 | Lys | Ile | Asp | Leu | Ile | Ser   | Asp | Glu | Ala | Leu | Glu | Lys | Leu | Glu | Asn |
|                     |     | 195 |     |     |     |       | 200 |     |     |     |     | 205 |     |     |     |
| Val                 | Leu | Arg | Ala | Leu | Gln | Pro   | Glu | Ala | Lys | Ile | Ile | Lys | Thr | Val | Asn |
|                     | 210 |     |     |     |     | 215   |     |     |     |     | 220 |     |     |     |     |
| Ala                 | Lys | Val | Glu | Leu | Ser | Asp   | Val | Leu | Asn | Thr | Gln | Leu | Phe | Asp | Phe |
| 225                 |     |     |     |     | 230 |       |     |     |     | 235 |     |     |     |     | 240 |
| Glu                 | Lys | Ala | Ser | Glu | Ser | Ala   | Gly | Trp | Ile | Lys | Glu | Leu | Thr | Ala | Gly |
|                     |     |     |     | 245 |     |       |     |     | 250 |     |     |     |     | 255 |     |
| Gly                 | His | Ala | Thr | His | Thr | Pro   | Glu | Thr | Glu | Glu | Tyr | Gly | Ile | Thr | Ser |
|                     |     |     | 260 |     |     |       |     | 265 |     |     |     |     | 270 |     |     |
| Phe                 | Ala | Tyr | Thr | Arg | Arg | Leu   | Pro | Phe | His | Ala | Lys | Arg | Phe | His | Gln |
|                     |     | 275 |     |     |     |       | 280 |     |     |     |     | 285 |     |     |     |
| Trp                 | Leu | Glu | Gln | Met | Pro | Glu   | Asn | Ile | Val | Arg | Thr | Lys | Gly | Ile | Val |
|                     | 290 |     |     |     |     | 295   |     |     |     |     |     | 300 |     |     |     |
| Trp                 | Leu | Ala | Gln | Tyr | Asn | Asp</ |     |     |     |     |     |     |     |     |     |

Gly Thr Asp Leu Asp Gln Glu Lys Ile Ser Arg Glu Leu Asp Ala Cys  
 370 375 380  
 Leu Ile His Ser Ser Glu Ile Asp Glu Asp Trp Arg Leu Leu Asp Ser  
 385 390 395 400  
 Pro Tyr Gln Trp Thr Tyr Asp Arg Arg Met  
 405 410

<210> 6593  
 <211> 49  
 <212> PRT  
 <213> S.epidermidis

<400> 6593  
 Lys Leu Cys Thr Tyr Asn Glu Tyr Ala Ala Tyr Ser Arg Asn Ile Phe  
 1 5 10 15  
 Met Met Tyr Asn Leu Val Ala Gln Ile Cys Ala Val Ser Phe Thr Val  
 20 25 30  
 Gln Ile Trp Thr Val Ile Tyr Thr Asn Leu Phe Thr Ser His Thr Val  
 35 40 45  
 Phe

<210> 6594  
 <211> 44  
 <212> PRT  
 <213> S.epidermidis

<400> 6594  
 Ile Asn Arg Thr Leu Tyr Leu Asn Lys Leu Pro Ile Ser Phe Cys Ser  
 1 5 10 15  
 Lys Val Arg Thr Leu Ser Pro Leu Ser Ile Lys Val Ile Gln Pro Lys  
 20 25 30  
 Ile Ala Lys Ala Arg Leu Ser Tyr Tyr Leu Phe Glu  
 35 40

<210> 6595  
 <211> 42  
 <212> PRT  
 <213> S.epidermidis

<400> 6595  
 Ser Phe Tyr Thr Phe Tyr Ser Tyr Cys Gln Lys Tyr Cys Phe Leu Lys  
 1 5 10 15  
 Val Thr Arg Cys Phe Gln Tyr Thr Ile Ser Lys His Leu Ala Thr Glu  
 20 25 30  
 Phe Lys Phe Lys Glu Phe Ser Arg Arg Arg  
 35 40

<210> 6596  
 <211> 86  
 <212> PRT  
 <213> S.epidermidis

<400> 6596  
 Gly Gly Asp Thr Leu Phe Thr Lys Lys Ile Leu Ile Tyr Ile Ala Leu  
 1 5 10 15

6593-6596

Leu Ile Thr Leu Ile Arg Phe Phe Ile Pro Leu His Pro Asp Phe Asp  
                   20                  25                  30  
 Thr Leu Leu Val Trp Leu Phe Ile Leu Tyr Ile Ile Pro Ile Ile Leu  
                   35                  40                  45  
 Cys Ile Ile Gly Phe Lys Ser Asp Lys Leu Ile Ala Thr Met Ile Met  
           50                  55                  60  
 Ile Pro Asn Leu Met Gly Ile Gly Tyr Arg Ile Phe Ile Phe Phe Asn  
 65                  70                  75                  80  
 Asp Phe Leu His Leu Lys  
                   85

<210> 6597

<211> 564

<212> PRT

<213> S.epidermidis

<400> 6597

Thr Lys Leu Thr Arg Cys Leu Met Tyr Lys Asp Tyr Asn Met Thr Gln  
 1                  5                  10                  15  
 Leu Thr Leu Pro Met Glu Thr Ser Val Leu Ile Pro Thr Asn Asp Ile  
                   20                  25                  30  
 Ser Arg His Val Asn Asp Ile Val Glu Thr Ile Pro Glu Thr Glu Phe  
                   35                  40                  45  
 Asp Glu Phe Arg His His Arg Gly Ala Thr Ser Tyr His Pro Lys Met  
           50                  55                  60  
 Met Leu Lys Val Val Leu Tyr Ala Tyr Thr Gln Ser Val Phe Ser Gly  
 65                  70                  75                  80  
 Arg Lys Ile Glu Lys Leu Leu Asn Asp Ser Ile Arg Met Met Trp Leu  
                   85                  90                  95  
 Ser Gln Asn Gln Lys Pro Ser Tyr Lys Thr Ile Asn Arg Phe Arg Val  
                   100                  105                  110  
 Asn Pro Lys Val Asp Ala Leu Leu Glu Ser Leu Phe Ile Gln Phe His  
           115                  120                  125  
 Ser Gln Cys Leu Lys Gln Asn Leu Ile Asp Asp Gln Ala Ile Phe Ile  
           130                  135                  140  
 Asp Gly Thr Lys Val Glu Ala Asn Ala Asn Arg Tyr Thr Phe Val Trp  
 145                  150                  155                  160  
 Lys Lys Ser Ile Gln Asn His Glu Ser Arg Met Asn Glu Asn Ser Lys  
                   165                  170                  175  
 Ala Leu Tyr His Glu Leu Val Ile Asn Lys Ile Ile Pro Glu Ile Lys  
                   180                  185                  190  
 Lys Asp His Asp Asn Asp Leu Thr Lys Glu Glu Ile Asp Leu Ile Gly  
           195                  200                  205  
 Ser His Leu Asp Lys Glu Ile Glu Asp Leu Asn Gln His Ile Asp Asn  
           210                  215                  220  
 Glu Lys Cys Thr Lys Ile Arg Lys Gln Ile Arg Leu Lys Arg Thr Lys  
 225                  230                  235                  240  
 Ile Lys Lys Tyr Lys Lys Gln Ile Asn Asp Tyr Ser Gln Arg Lys His  
                   245                  250                  255  
 Lys Tyr Glu Val Gln Lys Ser Ile Leu Lys Asp Arg Asn Ser Tyr Ser  
                   260                  265                  270  
 Lys Thr Asp His Asp Ala Thr Phe Met Arg Met Lys Glu Asp His Met  
           275                  280                  285  
 Lys Asn Gly Gln Leu Lys Pro Gly Tyr Asn Leu Gln Ile Ala Thr Asn  
           290                  295                  300  
 Ser Gln Phe Val Leu Phe Tyr Asp Val Tyr Gln Asn Pro Thr Asp Thr

305 310 315 320  
 Arg Thr Met Ile Pro Phe Leu Asn Thr Ile Gln Glu Thr Tyr Gly His  
 325 330 335  
 Leu Pro Glu Tyr Ile Val Ala Asp Ala Gly Tyr Gly Ser Glu Ala Asn  
 340 345 350  
 Tyr Met Ala Ile Ile Asp Asn Phe Asn Arg Thr Pro Leu Ile Thr Tyr  
 355 360 365  
 Gly Met Phe Ile Lys Asp Lys Thr Lys Lys Tyr Lys Ser Asp Ile Phe  
 370 375 380  
 Asn Thr Gln Asn Trp Asp Tyr Asp Glu Ile Asn Asp Glu Phe Ile Cys  
 385 390 395 400  
 Pro Asn Asn Lys Arg Leu Gly Phe Lys Arg Tyr Ala Tyr Arg His Asp  
 405 410 415  
 Lys Tyr Gly Phe Lys Arg Asp Phe Lys Leu Tyr Glu Cys Asp Asp Cys  
 420 425 430  
 Ser Glu Cys Pro Leu Lys Gln Gln Cys Met Asn Phe Asn Ser Lys Thr  
 435 440 445  
 Asn Lys Lys Ile Met Lys Asn Tyr Asn Trp Glu Tyr Phe Lys Ala Gln  
 450 455 460  
 Ile Asn Lys Lys Leu Ser Glu Pro Lys Thr Lys Thr Ile Tyr Ser Gln  
 465 470 475 480  
 Arg Lys Ile Asp Val Glu Pro Val Phe Gly Phe Met Lys Ala Ile Leu  
 485 490 495  
 Gly Phe Thr Arg Met Ser Val Arg Gly Ile Asp Lys Ala Lys Arg Glu  
 500 505 510  
 Leu Gly Phe Val Leu Met Ala Leu Asn Ile Arg Lys Val Thr Ala Gln  
 515 520 525  
 Arg Ala Glu Asn Asn Gln Lys Asn Asn Lys Lys Asp Asn Phe Tyr Ile  
 530 535 540  
 Ile Ser Ile Glu Ile Val Phe Phe Tyr Leu Ser Trp Asp Phe Met Ser  
 545 550 555 560  
 His Thr His Phe

&lt;210&gt; 6598

&lt;211&gt; 50

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6598

Gln Tyr Ile Thr Ile Lys Leu Ser Pro Leu Met Ile Gly Leu Arg Ile  
 1 5 10 15  
 Ile Asn Gly Leu Asn Tyr Ser Phe Ile Lys Met Leu Pro Asn Leu Tyr  
 20 25 30  
 Asn Ile Gly Lys Leu Asp Tyr Phe Asn Lys Ser Lys Leu Cys Ile Ser  
 35 40 45  
 Cys Leu  
 50

&lt;210&gt; 6599

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6599

Val Ile Gln Thr Ile Lys Leu Ser Tyr Lys Tyr Ile Gly Met Leu Leu

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<210> 6600
<211> 262
<212> PRT
<213> S.epidermidis
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<210> 6601
<211> 63
<212> PRT
<213> S.epidermidis
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<400> 6601  
Glu Leu His Ala Tyr Ile Leu Thr Lys Ile Phe Ser Pro Thr Leu Asn

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   |     | 5   |     | 10  |     | 15  |     |     |     |     |     |     |     |     |     |
| Arg | Lys | Tyr | Ser | Val | His | Phe | Met | Tyr | Ser | His | Asn | Arg | Glu | Ile | Ile |
|     |     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |
| Tyr | Asp | Phe | Asp | Gln | Phe | Ser | Asn | Arg | Leu | Val | Leu | Ala | Leu | Ile | Ile |
|     |     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |
| Val | Tyr | Ser | Val | Met | Ser | Leu | Cys | Pro | Val | Leu | Thr | Phe | Ala | Phe |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 6602

&lt;211&gt; 63

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6602

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Gln | Cys | Ala | Lys | Gly | Ser | Cys | Ser | Asn | Asn | Gly | Ser | Asn | Ile | Phe |
| 1   |     | 5   |     | 10  |     | 15  |     |     |     |     |     |     |     |     |     |
| Phe | Leu | His | Leu | Lys | Ser | Ser | Ser | Thr | Leu | Gly | Phe | Val | Tyr | Ser | Arg |
|     |     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |
| Phe | Asn | Asn | Thr | Lys | Ile | Leu | Tyr | Ser | Leu | Ile | Met | Tyr | Ser | Met | Phe |
|     |     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |
| Ala | Leu | Asp | Asp | Ile | Leu | Ile | Thr | Asn | Ile | Ile | Leu | Asn | Lys | Lys |     |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |

&lt;210&gt; 6603

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6603

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Phe | Ser | Ala | Leu | Lys | Gly | Val | Gly | Asn | Leu | Ser | Gly | His | Ser | Gln |
| 1   |     | 5   |     | 10  |     | 15  |     |     |     |     |     |     |     |     |     |
| Trp | Lys | Thr | Ser | Thr | Gly | Phe | Ile | Leu | Ala | Ser | Ala | Gly | Ser | Ala | Ile |
|     |     | 20  |     | 25  |     | 30  |     |     |     |     |     |     |     |     |     |
| Gly | Leu | Gly | Ala | Met | Trp | Lys | Phe | Pro | Tyr | Met | Ala | Gly | Ile | Tyr | Gly |
|     |     | 35  |     | 40  |     | 45  |     |     |     |     |     |     |     |     |     |
| Gly | Gly | Ala | Phe | Leu | Leu | Met | Phe | Leu | Ile | Phe | Thr | Ile | Phe | Val | Gly |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Leu | Pro | Leu | Leu | Ile | Met | Glu | Phe | Thr | Val | Gly | Lys | Met | Gly | Arg | Thr |
| 65  |     |     |     | 70  |     | 75  |     |     |     |     |     |     |     | 80  |     |
| Tyr | Thr | Thr | Gln | Ile | Tyr | Lys | Lys | Leu | Thr | Gly | Lys | Lys | Trp | Leu | Asn |
|     |     |     | 85  |     |     | 90  |     |     |     |     |     |     |     | 95  |     |
| Ile | Ile | Gly | Trp | Asn | Gly | Asn | Leu | Ala | Val | Phe | Ile | Leu | Phe | Gly | Phe |
|     |     | 100 |     | 105 |     | 110 |     |     |     |     |     |     |     |     |     |
| Tyr | Ser | Val | Ile | Gly | Gly | Trp | Ile | Ile | Ile | Tyr | Ile | Gly | Tyr | Val | Ile |
|     | 115 |     |     | 120 |     | 125 |     |     |     |     |     |     |     |     |     |
| Ala | Gln | Ile | Met | Val | Phe | Lys | Ser | Ser | Thr | Leu | Thr | Asn | Ile | Gln | Phe |
|     | 130 |     |     | 135 |     | 140 |     |     |     |     |     |     |     |     |     |
| Glu | Thr | Ile | Ile | Ser | Asn | Pro | Trp | Leu | Thr | Val | Leu | Gly | Gln | Gly | Ile |
| 145 |     |     |     | 150 |     | 155 |     |     |     |     |     |     |     | 160 |     |
| Phe | Ile | Leu | Ile | Thr | Met | Val | Ile | Val | Met | Leu | Gly | Val | Glu | Lys | Gly |
|     |     |     | 165 |     |     | 170 |     |     |     |     |     |     |     | 175 |     |
| Leu | Glu | Lys | Ala | Ser | Lys | Ile | Met | Met | Pro | Leu | Leu | Phe | Ile | Phe | Leu |
|     |     | 180 |     | 185 |     | 190 |     |     |     |     |     |     |     |     |     |
| Ile | Ile | Val | Val | Ala | Gln | Ser | Leu | Thr | Leu | Glu | Gly | Ala | Leu | Glu | Gly |
|     | 195 |     |     | 200 |     | 205 |     |     |     |     |     |     |     |     |     |
| Val | Arg | Tyr | Ile | Leu | Gln | Pro | Arg | Val | Glu | Asp | Met | Ser | Ile | Gln | Gly |

6602T=6603T=6604T

210 215 220  
 Val Leu Phe Ala Leu Gly Gln Ser Phe Phe Thr Leu Ser Leu Gly Thr  
 225 230 235 240  
 Thr Gly Met Ile Thr Tyr Ala Ser Tyr Ala Pro Lys Asn Met Thr Ile  
 245 250 255  
 Lys Ser Ser Ala Leu Ser Ile Val Val Met Asn Ile Leu Ile Ser Val  
 260 265 270  
 Leu Ala Gly Leu Ala Ile Phe Pro Ala Leu Lys Thr Phe Gly Tyr Gln  
 275 280 285  
 Pro Gln Glu Gly Pro Gly Leu Leu Phe Lys Val Leu Pro Leu Val Phe  
 290 295 300  
 Ser Glu Met Thr Phe Gly Thr Phe Phe Tyr Phe Ile Phe Leu Leu Leu  
 305 310 315 320  
 Phe Leu Phe Ala Ala Leu Thr Ser Ser Ile Ser Leu Leu Glu Leu Asn  
 325 330 335  
 Val Ser Asn Phe Thr Lys Asn Asp Asn Ser Lys Arg Gln Lys Val Ala  
 340 345 350  
 Ile Ile Gly Ser Ile Leu Val Phe Ile Ile Ser Ile Pro Ala Thr Leu  
 355 360 365  
 Ser Phe Ser Ser Leu Ser His Leu Arg Phe Gly Ala Gly Thr Ile Phe  
 370 375 380  
 Asp Asn Met Asp Phe Ile Val Ser Asn Ile Leu Met Pro Leu Gly Ala  
 385 390 395 400  
 Leu Gly Thr Thr Leu Val Val Gly Gln Leu Leu Asp Lys Lys Leu Leu  
 405 410 415  
 Lys Glu Ser Phe Gly Lys Asp Lys Phe Asn Leu Phe Leu Pro Trp Tyr  
 420 425 430  
 Tyr Leu Ile Lys Phe Ile Met Pro Ile Val Ile Ile Leu Val Phe Ile  
 435 440 445  
 Val Gln Leu Phe  
 450

<210> 6604  
 <211> 199  
 <212> PRT  
 <213> S.epidermidis

<400> 6604  
 Asn Met His Tyr Pro Glu Pro Ile Ser Lys Leu Ile Asp Ser Phe Met  
 1 5 10 15  
 Lys Leu Pro Gly Ile Gly Pro Lys Thr Ala Gln Arg Leu Ala Phe His  
 20 25 30  
 Thr Leu Asp Met Lys Glu Asp Asp Val Val Lys Phe Ala Lys Ala Leu  
 35 40 45  
 Val Asp Val Lys Arg Glu Leu Thr Tyr Cys Ser Val Cys Gly His Ile  
 50 55 60  
 Thr Glu Asn Asp Pro Cys Tyr Ile Cys Glu Asp Lys Gln Arg Asp Arg  
 65 70 75 80  
 Ser Val Ile Cys Val Val Glu Asp Asp Lys Asp Val Ile Ala Met Glu  
 85 90 95  
 Lys Met Arg Glu Tyr Lys Gly Leu Tyr His Val Leu His Gly Ser Ile  
 100 105 110  
 Ser Pro Met Asp Gly Ile Gly Pro Glu Asp Ile Asn Ile Pro Ala Leu  
 115 120 125  
 Val Glu Arg Leu Lys Asn Asp Glu Val Lys Glu Leu Ile Leu Ala Met  
 130 135 140



Asn Pro Asn Leu Glu Gly Glu Ser Thr Ala Met Tyr Ile Ser Arg Leu  
 145 150 155 160  
 Val Lys Pro Ile Gly Ile Lys Val Thr Arg Leu Ala Gln Gly Leu Ser  
 165 170 175  
 Val Gly Gly Asp Leu Glu Tyr Ala Asp Glu Val Thr Leu Ser Lys Ala  
 180 185 190  
 Ile Ala Gly Arg Thr Glu Met  
 195

<210> 6605

<211> 876

<212> PRT

<213> S.epidermidis

<400> 6605

Asn Pro Ile Tyr Arg Lys Ser Ser Ile Ile Phe Lys Thr Ile Leu Val  
 1 5 10 15  
 Lys Glu Asp Arg Ile Met Leu Gln Ser Asp Ile Asn Glu Leu Val Asn  
 20 25 30  
 Gln Ala Lys Arg Val Ile Thr Pro Leu Ser Pro Ile Ser Thr Phe Ala  
 35 40 45  
 Ala Arg Asn Pro Trp Glu Gly Leu Glu Asp Ala Ser Phe Asp Gln Val  
 50 55 60  
 Ala Arg Trp Leu Lys Ser Val Arg Asp Ile Asp Ile Tyr Pro Asn Ala  
 65 70 75 80  
 Ser Thr Ile His Arg Ala Ile Ser Asn Lys Glu Ile Asp Leu Lys Val  
 85 90 95  
 Phe Glu Glu Arg Leu Asp Glu Asn Arg Ala His Tyr Asn Asn Arg Ser  
 100 105 110  
 Leu Ser Asp Ser Asp Ile Asn Thr Tyr Ile Gln Arg Ala Lys Asn Leu  
 115 120 125  
 Lys Thr Ile Glu Glu Gly Tyr Phe Asn Thr Lys Asp Asn Glu Lys Leu  
 130 135 140  
 Glu Lys Trp Val Gln Thr Asn Phe Lys Asp Tyr Lys Lys Lys Glu Asp  
 145 150 155 160  
 Val Ile Ala Gln Ser Ala Ser Val Phe Thr Lys Glu Gly Thr Arg Leu  
 165 170 175  
 Ile Asp Ile Leu Asn Ala His Met Ile Lys Trp Ser Lys Leu Tyr Val  
 180 185 190  
 Asp Asp Phe Gln Ser Ser Trp Thr Met Pro Lys Arg Glu Lys Gly Phe  
 195 200 205  
 Tyr His Ala Trp Gln Arg Leu Val Lys His Asp Pro Leu Phe Thr Lys  
 210 215 220  
 Lys Gln Arg Leu Thr Leu Thr His Leu Pro Asn Gln Ala Thr Glu Ala  
 225 230 235 240  
 Ile Glu Tyr Ala Phe Gln Glu Leu Gly Val Lys Glu Glu His Arg Gln  
 245 250 255  
 Ser Tyr Ile Glu Ser His Leu Leu Ser Leu Pro Gly Trp Ala Gly Ile  
 260 265 270  
 Met Tyr His Arg Ser Gln Thr Gln Ser Asn Asp Ala Tyr Leu Leu Thr  
 275 280 285  
 Asp Tyr Val Ala Ile Arg Leu Ser Ile Glu Met Val Leu Leu Asn Asp  
 290 295 300  
 His His Thr Thr Leu Leu Lys Lys Ser Ile Tyr Leu Gln Lys Lys Leu  
 305 310 315 320  
 Glu Gln Ile Arg Tyr Leu Leu Phe Asn Ile Gln Met Asn Val Glu Gln



770                      775                      780  
 Tyr Gly Ser Gly Ser Lys Thr Thr Gln Thr Val Thr Ser Gly Val Gly  
 785                      790                      795                      800  
 Val Met Gln Gly Asn Ala Ser Asp Leu Met Tyr Gly Leu Pro Trp Gln  
                                  805                      810                      815  
 Ser Val Met Met Asn Asp Lys Glu Ala Tyr His Ala Pro Ile Arg Leu  
                                  820                      825                      830  
 Leu Ile Val Ile Gln Ala Pro Asp Ala Tyr Ile Gln Arg Leu Leu Lys  
                                  835                      840                      845  
 His His Asn His Phe Arg Gln Lys Val Asp His Gln Trp Ile Arg Leu  
                                  850                      855                      860  
 Ala Ser Ile Asp Glu Asn Asn Ser Trp Lys Asp Trp  
 865                      870                      875

&lt;210&gt; 6606

&lt;211&gt; 101

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6606

Gly Tyr Leu Phe Val Tyr Asn Arg Thr Gln Cys Gly Phe Val Lys Cys  
 1                      5                      10                      15  
 Val Arg Lys Trp Thr Tyr Tyr Leu Leu Ser Leu Ile Ser Ser Asn Leu  
                                  20                      25                      30  
 Gly Ile Leu Ile Tyr Thr Gln Pro Gln Cys Gly Phe Ser Asn Arg Leu  
                                  35                      40                      45  
 Asn Asn Ser Ile Tyr Leu Leu Ser Ser Asn Val Ser Val Leu Ile Asn  
                                  50                      55                      60  
 Asn Thr Asn Ala Asp Ala Leu Ser Gln Cys Ile Arg Lys Arg Lys Tyr  
 65                      70                      75                      80  
 Ser Phe Ser Lys Ile Lys Leu Asn Thr Ala Glu Met Ser Ala Leu Val  
                                  85                      90                      95  
 Asp Ile Ser Gln Arg  
                                  100

&lt;210&gt; 6607

&lt;211&gt; 1529

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6607

Ser Asn Leu Tyr Ile Glu Gln Ile Asn Lys Leu His Tyr Ser Asn Tyr  
 1                      5                      10                      15  
 Tyr Gln Thr Lys Leu Ser Glu Asn Ser Asn Lys Gly Val Cys Ile Met  
                                  20                      25                      30  
 Tyr Asn Glu Lys Leu Lys Lys Gly Leu Tyr Asp Tyr Arg Glu Glu His  
                                  35                      40                      45  
 Asp Ala Cys Gly Ile Gly Phe Tyr Ala Asn Met Asp Asn Lys Arg Ser  
 50                      55                      60  
 His Asp Ile Ile Glu Lys Ser Leu Glu Met Leu Arg Arg Leu Asp His  
 65                      70                      75                      80  
 Arg Gly Gly Val Gly Ala Asp Gly Ile Thr Gly Asp Gly Ala Gly Ile  
                                  85                      90                      95  
 Met Thr Glu Ile Pro Tyr Gln Leu Phe Glu Gln Leu Thr Glu Phe Lys  
                                  100                      105                      110  
 Val Pro Gly Glu Gly Tyr Tyr Ala Val Gly Leu Phe Phe Ser Lys Glu





|   |      |      |
|---|------|------|
| 1010  | 1015 | 1020 |
| Val Lys Leu Val Ser Lys Thr Gly Val Gly Thr Ile Ala Ser Gly Val |      |      |
| 1025  | 1030 | 1035 |
| Ala Lys Ala Phe Ala Asp Lys Ile Val Ile Ser Gly Tyr Asp Gly Gly |      | 1040 |
|   | 1045 | 1050 |
| Thr Gly Ala Ser Pro Lys Thr Ser Ile Gln His Ala Gly Leu Pro Trp |      | 1055 |
|   | 1060 | 1065 |
| Glu Ile Gly Leu Ala Glu Thr His Gln Thr Leu Lys Leu Asn Asp Leu |      | 1070 |
|   | 1075 | 1080 |
| Arg Ser Arg Val Lys Leu Glu Thr Asp Gly Lys Leu Leu Thr Gly Lys |      | 1085 |
|   | 1090 | 1095 |
| Asp Val Ala Tyr Ala Cys Ala Leu Gly Ala Glu Glu Phe Gly Phe Ala |      | 1100 |
| 1105  | 1110 | 1115 |
| Thr Ala Pro Leu Val Val Leu Gly Cys Ile Met Met Arg Val Cys His |      | 1120 |
|   | 1125 | 1130 |
| Asn Asp Thr Cys Pro Val Gly Val Ala Thr Gln Asn Lys Asp Leu Arg |      | 1135 |
|   | 1140 | 1145 |
| Ala Leu Phe Arg Gly Lys Ala Gln His Val Val Asn Phe Met Tyr Phe |      | 1150 |
|   | 1155 | 1160 |
| Ile Ala Glu Glu Leu Arg Glu Ile Leu Ala Ser Leu Gly Leu Glu Thr |      | 1165 |
| 1170  | 1175 | 1180 |
| Val Glu Glu Leu Val Gly Arg Thr Asp Leu Leu Gln Arg Ser Thr Gln |      | 1185 |
| 1185  | 1190 | 1195 |
| Leu Lys Pro Asn Ser Lys Ala Ala Ser Leu Gln Ile Glu Arg Leu Ile |      | 1200 |
|   | 1205 | 1210 |
| Glu Gln Phe Asp Gly Val Asn Thr Lys Glu Ile Ser Gln Asn His His |      | 1215 |
|   | 1220 | 1225 |
| Leu Asp Glu Gly Phe Asp Leu Asn Tyr Leu Tyr Pro Asp Ala Arg Tyr |      | 1230 |
|   | 1235 | 1240 |
| Ser Ile Glu Asn Gly His Ser Phe Thr Gly Asn Tyr Val Val Asn Asn |      | 1245 |
| 1250  | 1255 | 1260 |
| Glu Gln Arg Asp Val Gly Val Ile Thr Gly Ser Ala Ile Ala Lys Gln |      | 1265 |
| 1265  | 1270 | 1275 |
| Tyr Gly Glu Glu Gly Leu Pro Glu Asp Thr Ile Leu Ala Tyr Thr Glu |      | 1280 |
|   | 1285 | 1290 |
| Gly His Ala Gly Gln Ser Leu Ala Ala Tyr Ala Pro Arg Gly Leu Thr |      | 1295 |
|   | 1300 | 1305 |
| Ile His His Thr Gly Asp Ala Asn Asp Tyr Val Gly Lys Gly Leu Ser |      | 1310 |
|   | 1315 | 1320 |
| Gly Gly Thr Val Ile Val Asn Ala Pro Asn Ser Gln Arg Glu Asn Glu |      | 1325 |
| 1330  | 1335 | 1340 |
| Ile Ile Ala Gly Asn Val Asn Phe Tyr Gly Ala Ser Arg Gly Lys Ala |      | 1345 |
| 1345  | 1350 | 1355 |
| Phe Ile Asn Gly Lys Ala Gly Glu Arg Phe Cys Ile Arg Asn Ser Gly |      | 1360 |
|   | 1365 | 1370 |
| Ala Asp Val Val Val Glu Gly Ile Gly Asp His Gly Leu Glu Tyr Met |      | 1375 |
|   | 1380 | 1385 |
| Thr Gly Gly His Val Ile Ile Leu Gly Asp Val Gly Lys Asn Phe Gly |      | 1390 |
|   | 1395 | 1400 |
| Gln Gly Met Ser Gly Gly Val Ser Tyr Ile Phe Pro Ser Asp Val Glu |      | 1405 |
| 1410  | 1415 | 1420 |
| Lys Phe Lys Lys Val Asn Ala Leu Glu Thr Leu Glu Phe Ser Ser Ile |      | 1425 |
| 1425  | 1430 | 1435 |
| Arg Phe Asp Glu Glu Lys Ser Leu Ile Lys Asp Met Leu Glu Ala His |      | 1440 |
|   | 1445 | 1450 |
| Phe Lys His Thr Arg Ser Asn Lys Ala Arg Gln Leu Leu Asp Gln Phe |      | 1455 |

|                                     |   |      |      |      |      |
|-------------------------------------|---|------|------|------|------|
|                                     | 1460  |      | 1465 |      | 1470 |
| Asp                                 | Asn Ile Glu Lys Leu Ala Ile Lys Val Ile Pro Lys Asp Tyr Lys |      |      |      |      |
|                                     | 1475  |      | 1480 |      | 1485 |
| Leu                                 | Met Met Gln Lys Ile Asp Leu Lys Lys Arg Gln Met Glu Arg Glu |      |      |      |      |
|                                     | 1490  |      | 1495 |      | 1500 |
| Asp                                 | Glu Ala Thr Leu Ala Ala Phe Tyr Asp Asp Arg Glu Thr Ile Glu |      |      |      |      |
| 1505                                |   | 1510 |      | 1515 | 1520 |
| Gln Glu Leu Gln Pro Ala Val Ile Tyr |   |      |      |      |      |
|                                     | 1525  |      |      |      |      |

<210> 6608  
 <211> 52  
 <212> PRT  
 <213> S.epidermidis

<400> 6608

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| His | Pro | Asp | Leu | Asn | Asn | Leu | Leu | Leu | His | Arg | Asp | Phe | Ile | Phe | Thr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asn | His | Arg | Gly | Ser | Pro | Leu | Ser | Ile | Thr | Ser | Ile | Asn | Arg | Asn | Leu |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gln | Ile | Gly | Ala | Lys | Asn | Val | Gly | Ile | Glu | Lys | His | Ile | Thr | Ser | His |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Thr | Asn | Val | Ser |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 50  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6609  
 <211> 180  
 <212> PRT  
 <213> S.epidermidis

<400> 6609

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asn | Gly | Gly | Tyr | Met | His | Ile | Tyr | Leu | Ser | Thr | Leu | Thr | Glu | Val | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Tyr | Glu | Thr | Ser | Leu | Asn | Ser | Ile | Glu | Asn | Asn | Tyr | Asn | Leu | Asn | Pro |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Glu | Ser | Ser | Trp | Gln | Asp | Arg | Ala | Arg | Val | Lys | Asn | Leu | Arg | Lys | Leu |
|     |     | 35  |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Glu | Ser | Tyr | Asn | Tyr | Glu | Leu | Glu | Val | Ile | Ala | Lys | Asn | Glu | Leu | Asn |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Glu | Val | Ile | Gly | His | Val | Val | Leu | Ala | Glu | Val | Lys | Leu | Ser | Ser | Lys |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Asn | Lys | Lys | Ala | Ile | Ala | Leu | Ala | Ile | Gly | Ala | Leu | Ser | Val | Asp | Lys |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     |     | 95  |     |
| Ser | Ile | Arg | Asn | Gln | Gly | Leu | Gly | Gln | Ala | Leu | Leu | Lys | Ala | Val | Glu |
|     |     |     | 100 |     |     |     | 105 |     |     |     |     |     |     | 110 |     |
| Glu | Arg | Ala | Lys | Glu | Gln | Gly | Tyr | Cys | Ala | Ile | Phe | Val | Asn | Asn | His |
|     | 115 |     |     |     | 120 |     |     |     |     |     | 125 |     |     |     |     |
| Pro | Gln | Tyr | Phe | Glu | Lys | Ser | Asp | Tyr | Glu | Ala | Ala | His | Leu | Tyr | Asn |
|     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |     |
| Ile | His | Ile | Glu | Glu | Lys | Arg | Asn | His | Gln | Ser | Leu | Leu | Val | Lys | Phe |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     | 160 |     |
| Leu | Lys | Pro | Val | Gln | Asn | Glu | Trp | Ser | Gly | Met | Thr | Val | Tyr | Tyr | Pro |
|     |     |     | 165 |     |     |     | 170 |     |     |     |     |     | 175 |     |     |
| Glu | Val | Leu | Asp |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 180 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6610  
 <211> 503  
 <212> PRT  
 <213> S.epidermidis

<400> 6610

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Asp Gly Gly Tyr Ala Met Leu Ser Ser Glu Leu Ile Leu Phe Met Phe
1      5      10      15
Phe Ile Thr Leu Val Ile Ala Ile Leu Ser Gly Leu Ile Phe Leu Asn
20      25      30
His Arg Val Pro Ile Gln Tyr Ile Lys Phe His Ile Tyr Leu Leu Val
35      40      45
Leu Pro Ile Ile Thr Gly Leu Ser Gly Leu Ile Phe Phe Gly Glu Arg
50      55      60
Ala Asn Val Gly Pro Phe Val Val Asp His Leu Thr Trp Leu Met Met
65      70      75      80
Thr Phe Ile Leu Thr Leu Gly Phe Ile Ile Gln Lys Phe Ser Met Arg
85      90      95
Tyr Leu Ile Gly Asp Met His Tyr Arg Lys Tyr Phe Pro Phe Phe Thr
100     105     110
Leu Ile Thr Ala Phe Ala Ser Leu Ala Trp Leu Ser Gly Asp Leu Arg
115     120     125
Leu Met Thr Met Phe Trp Gly Ala Thr Leu Phe Val Leu Thr Arg Leu
130     135     140
Ile Lys Val Asn Lys Leu Trp Lys Val Pro Arg Glu Ala Ala Arg Ile
145     150     155     160
Ser Ala Trp Ser Phe Ile Leu Ala Trp Leu Ser Leu Leu Ile Ala Val
165     170     175
Ile Leu Leu Tyr Ile Ala Thr Gly Asp Trp Tyr Ile Tyr Ser Asn Met
180     185     190
Ser Asp Asp Asn Ala Ile Asn Tyr Gly Met Arg Leu Cys Ile Asn Leu
195     200     205
Leu Ile Val Leu Ala Val Ile Ile Pro Ala Ala Gln Phe Pro Phe Gln
210     215     220
Gly Trp Leu Ile Glu Ser Val Ala Ala Pro Thr Pro Val Ser Ala Ile
225     230     235     240
Met His Ala Gly Ile Val Asn Ala Gly Gly Val Ile Leu Thr Arg Phe
245     250     255
Ser Pro Val Phe Asn Asp Glu Ile Ala Ile Ser Leu Leu Leu Ile Ile
260     265     270
Ala Ser Ile Ser Val Leu Ser Gly Ser Gly Ile Thr Leu Val His Val
275     280     285
Asp Tyr Lys Arg Gln Leu Val Arg Ser Thr Ile Ser Gln Met Gly Phe
290     295     300
Met Leu Val Gln Cys Ala Leu Gly Ala Tyr Ser Ala Ala Ile Val His
305     310     315     320
Leu Ile Leu His Gly Val Phe Lys Ala Thr Leu Phe Leu Gln Ser Gly
325     330     335
Ser Val Val Lys Arg Phe Asn Ile Pro Thr Ser Pro Ser Val Lys Lys
340     345     350
Ser Tyr Gly Trp Leu Val Phe Gly Arg Leu Leu Ala Ile Leu Ile Ala
355     360     365
Ile Ile Phe Trp Leu Asn Ser Asp Arg His Ala Tyr Asp Val Leu Ser
370     375     380
Ala Leu Ile Leu Ala Trp Ser Leu Met Val Ser Trp Asn Gln Leu Val
385     390     395     400

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Ala Phe Ser His Gly Leu Ile Gly Arg Val Ile Gly Val Cys Met Ile  
                           405                          410                          415  
 Ile Val Val Ala Ile Val Tyr Ile Ile Thr His His Tyr Phe Phe Thr  
                           420                          425                          430  
 Thr Leu Ser Asn Val Asp Ile His Ile Val Ser Pro Pro Leu Ile Ser  
                           435                          440                          445  
 Ile Ile Leu Ser Ile Ala Ile Ile Val Phe Gly Ser Met Leu Ser Ile  
                           450                          455                          460  
 Trp Val Ser Arg Arg Arg Glu Ser Lys Ala Phe Ala Lys Leu Tyr Leu  
 465                          470                          475                          480  
 Trp Leu Ile Lys Val Gly Glu Ala Lys Thr Gln Ser Ile Glu Ser His  
                           485                          490                          495  
 Pro Ser Tyr Leu Lys Arg Phe  
                           500

<210> 6611

<211> 70

<212> PRT

<213> S.epidermidis

<400> 6611

Arg Asp Asn Leu Tyr Gly Tyr Leu Tyr Phe Leu Arg Ser Asn Lys Asn  
 1                          5                          10                          15  
 Lys Leu His Thr Pro Ser Phe Pro Thr Ser Glu Val Gln Lys Gln Pro  
                           20                          25                          30  
 Leu Lys Pro Met Pro Lys Gly Phe His Tyr Ser Met Leu Leu Phe Pro  
                           35                          40                          45  
 Leu Asp Asp Met Tyr Phe Ser His Val Phe Ser Thr Ile Asp Ile Arg  
 50                          55                          60  
 Cys His Ile Arg Val Leu  
 65                          70

<210> 6612

<211> 41

<212> PRT

<213> S.epidermidis

<400> 6612

Asn Ser Ile His Ser Val Leu Leu Gly Lys Ile Leu Leu Thr Tyr Leu  
 1                          5                          10                          15  
 Val Phe Asn Val Gln Met Asn Val Asn Lys His Ser Lys Leu Asn Thr  
                           20                          25                          30  
 Ile Cys His Val Ile Pro Ser Ser Ser  
                           35                          40

<210> 6613

<211> 54

<212> PRT

<213> S.epidermidis

<400> 6613

Glu Lys Cys Leu Gln Arg Gln Leu Ile Ile Glu Lys Asp Leu Lys Leu  
 1                          5                          10                          15  
 Asp Ile Ser Tyr Ser Ser Lys Ser Ile Thr Phe Lys Thr Phe Pro Ser  
                           20                          25                          30  
 Phe Asn Tyr Gly Ile Phe Gly Asp His Phe Thr Pro Phe Thr Ala Thr

35  
Val Arg Ser Thr Val Phe  
50

40

45

<210> 6614  
<211> 180  
<212> PRT  
<213> S.epidermidis

&lt;400&gt; 6614

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Arg | Arg | Ile | His | Met | Lys | Lys | Leu | Leu | Cys | Thr | Leu | Phe | Ala | Ala | Ala |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Val | Leu | Ser | Ala | Cys | Gly | Gln | Asp | Thr | Lys | Glu | Asp | Glu | Asn |     |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Lys | Lys | Ser | Glu | Ile | Thr | Thr | Glu | Lys | Lys | Ser | Asp | Asp | Lys | Lys | Asp |
|     |     | 35  |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Lys | Lys | Thr | Asn | Glu | Asp | Lys | Lys | Ser | Gly | Glu | Gln | Lys | Lys | Ser | Gln |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Glu | Lys | Lys | Asn | Asn | Lys | Ser | Met | Gln | Glu | Ser | Ala | Thr | Asn | Glu | Gln |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Val | Gln | Ser | Gln | Gln | Gln | Thr | Gln | Gln | Ala | Asn | Gln | Gln | Ala | Gln | Gln |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Ser | Asp | Asn | His | Glu | Pro | Thr | Lys | Glu | Glu | Ile | Tyr | Glu | Trp | Asp | Lys |
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |     |
| Gln | Asn | Ile | Pro | Gly | Gly | Thr | Asp | Phe | Gly | Leu | Ile | Asp | Pro | Glu | Asp |
|     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |     |
| Val | Asn | Glu | Ala | Ser | Glu | Ser | Gln | Asn | Glu | Glu | Pro | Asp | Glu | Trp | Ile |
|     | 130 |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |     |
| Lys | Gly | Gln | Glu | Glu | Trp | Asn | Asn | Ala | Thr | Gln | Ser | Glu | Lys | Glu | Glu |
| 145 |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |     |
| Leu | Arg | Lys | Gln | Asn | Ala | Gln | Lys | Tyr | Gly | Tyr | Glu | Tyr | Asp | Pro | Lys |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |     |
| Asp | Tyr | Glu | Glu |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     | 180 |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6615  
<211> 162  
<212> PRT  
<213> S.epidermidis

&lt;400&gt; 6615

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Ile | Gln | Gln | Leu | Lys | Gln | Ser | Ile | His | His | Leu | Lys | Gln | Leu | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Asp | Ala | Met | Ile | Gln | Leu | Ala | Gln | Gln | Leu | Asp | Tyr | Phe | Glu | Asn | Ile |
|     |     | 20  |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| His | Ser | Ile | Pro | Gly | Ile | Gly | Lys | Leu | Ser | Thr | Ala | Met | Ile | Ile | Gly |
|     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |
| Glu | Ile | Gly | Asp | Ile | Lys | Arg | Phe | Lys | Ser | Asn | Lys | Gln | Leu | Asn | Ala |
|     | 50  |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |
| Phe | Val | Gly | Ile | Asp | Ile | Lys | Arg | Tyr | Gln | Ser | Gly | His | Thr | His | Cys |
| 65  |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Arg | Asp | Thr | Ile | Asn | Lys | Arg | Gly | Asn | Lys | Lys | Ala | Arg | Lys | Leu | Leu |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Phe | Trp | Val | Ile | Met | Asn | Ile | Ile | Arg | Gly | Gln | His | His | Tyr | Asp | Asn |
|     |     | 100 |     |     |     |     | 105 |     |     |     | 110 |     |     |     |     |
| His | Val | Val | Asp | Tyr | Tyr | Tyr | Lys | Leu | Arg | Lys | Gln | Pro | Asn | Glu | Lys |

|   |     |     |
|---|-----|-----|
| 115   | 120 | 125 |
| Pro His Lys Thr Ala Ile Ile Ala Cys Ile Asn Arg Leu Leu Lys Thr |     |     |
| 130   | 135 | 140 |
| Ile His Tyr Leu Val Met Asn His Lys Leu Tyr Asp Tyr Gln Met Ser |     |     |
| 145   | 150 | 155 |
| Pro His   |     | 160 |

<210> 6616  
 <211> 51  
 <212> PRT  
 <213> S.epidermidis

|   |
|---|
| <400> 6616  |
| Ile Val Lys His Cys Asn Lys Leu Gln Leu Thr Leu Pro Met Glu Thr |
| 1 5 10 15   |
| Phe Ile Arg Ile Pro Gln Ile Asn Pro Pro Arg His Ile Asn Glu Met |
| 20 25 30  |
| Ile Glu Thr Ile His Asn Arg Asp Phe Asp Glu Phe Ser Ser Leu Lys |
| 35 40 45  |
| Arg Thr Ile   |
| 50  |

<210> 6617  
 <211> 47  
 <212> PRT  
 <213> S.epidermidis

|   |
|---|
| <400> 6617  |
| Val Thr Met His Val Leu Thr Val Pro Asn Gln Lys Ala Thr Ala Asn |
| 1 5 10 15   |
| Tyr Val Pro Ala Ala Ala Val Ile Arg Arg Trp Gln Ala Leu Ser Gly |
| 20 25 30  |
| Ile Ile Gly Arg Lys Ala Arg Val Gly Gly Phe Leu Ser Leu Met     |
| 35 40 45  |

<210> 6618  
 <211> 576  
 <212> PRT  
 <213> S.epidermidis

|   |
|---|
| <400> 6618  |
| Val Ile Val Asn Gly Gly Ala Thr Val Asp Tyr Gln Ala Leu Tyr Arg |
| 1 5 10 15   |
| Met Tyr Arg Pro Gln Ser Phe Asp Asp Val Val Gly Gln Thr His Val |
| 20 25 30  |
| Thr Lys Thr Leu Arg Asn Ala Ile Ser Lys Gly Lys Gln Ser His Ala |
| 35 40 45  |
| Tyr Ile Phe Ser Gly Pro Arg Gly Thr Gly Lys Thr Ser Ile Ala Lys |
| 50 55 60  |
| Val Phe Ala Lys Ala Ile Asn Cys Leu Asn Ser Asp Asp Gly Glu Pro |
| 65 70 75 80   |
| Cys Asn Glu Cys Ala Ile Cys Lys Gly Ile Thr Gln Gly Thr Asn Asn |
| 85 90 95  |
| Asp Val Ile Glu Ile Asp Ala Ala Ser Asn Asn Gly Val Asp Glu Ile |
| 100 105 110   |

Arg Asn Ile Arg Asp Lys Val Lys Tyr Ala Pro Ser Glu Ser Lys Tyr  
 115 120 125  
 Lys Val Tyr Ile Ile Asp Glu Val His Met Leu Thr Thr Gly Ala Phe  
 130 135 140  
 Asn Ala Leu Leu Lys Thr Leu Glu Glu Pro Pro Ala His Ala Ile Phe  
 145 150 155 160  
 Ile Leu Ala Thr Thr Glu Pro His Lys Ile Pro Pro Thr Ile Ile Ser  
 165 170 175  
 Arg Ala Gln Arg Phe Asp Phe Lys Ala Ile Ser Ser Asp Gln Ile Ile  
 180 185 190  
 Asp Arg Leu Lys Tyr Val Ala Asn Ser Gln Ser Leu Asp Tyr Asp Asp  
 195 200 205  
 Ala Ala Leu Glu Phe Ile Ala Lys Ala Ser Glu Gly Gly Met Arg Asp  
 210 215 220  
 Ala Leu Ser Ile Met Asp Gln Ala Ile Ala Phe Gly Asp Glu Arg Leu  
 225 230 235 240  
 Thr Leu Gln Asp Ala Leu Asn Val Thr Gly Ser Val Asp Glu Ala Ala  
 245 250 255  
 Leu Asn Glu Leu Phe Asn Asp Ile Val Lys Ser Asp Val Lys Ala Ala  
 260 265 270  
 Phe Asn Arg Tyr His His Phe Ile Ser Glu Gly Lys Glu Val Asn Arg  
 275 280 285  
 Leu Ile Asn Asp Met Ile Tyr Phe Val Arg Asp Thr Ile Met Asn Lys  
 290 295 300  
 Thr Ser Asn Glu Ser Val His Phe Glu Ser Leu Ile His Phe Asp Leu  
 305 310 315 320  
 Asp Met Leu Tyr Arg Met Ile Asp Ile Ile Asn Asp Thr Leu Val Ser  
 325 330 335  
 Ile Arg Phe Ser Val Asn Gln Ser Val His Phe Glu Val Leu Leu Val  
 340 345 350  
 Lys Leu Ala Glu Met Ile Lys Thr Gln Pro Gln Thr Val Gln Asn Val  
 355 360 365  
 Ala Thr Ala Ser Val Ala Asn Glu Pro Asp Asn Glu Met Leu Leu Gln  
 370 375 380  
 Arg Leu Glu Gln Leu Glu Asn Glu Leu Lys Thr Leu Lys Glu Gln Gly  
 385 390 395 400  
 Ile Lys Thr Asn Lys Val Ser Gln Gln Pro Lys Lys Pro Thr Arg Thr  
 405 410 415  
 Ile Gln Arg Ser Lys Asn Thr Phe Ser Met Gln Gln Ile Ala Lys Val  
 420 425 430  
 Leu Asp Lys Ala Asn Lys Asp Asp Ile Lys Leu Leu Lys Asn His Trp  
 435 440 445  
 Gln Glu Val Ile Asp His Ala Lys Ser Asn Asp Lys Lys Ser Leu Val  
 450 455 460  
 Ser Leu Leu Leu Asn Ser Glu Pro Val Ala Ala Ser Glu Asp His Val  
 465 470 475 480  
 Leu Val Lys Phe Asp Glu Glu Ile His Cys Glu Ile Val Asn Lys Asp  
 485 490 495  
 Asp Glu Lys Arg Asn Asn Ile Glu Ser Val Val Cys Asn Ile Val Asn  
 500 505 510  
 Lys Thr Val Lys Val Val Gly Val Pro Ala Asp Gln Trp Leu Arg Val  
 515 520 525  
 Arg Ala Glu Tyr Leu Gln Asn Arg Asn Thr Asn Glu Thr His Gln Ser  
 530 535 540  
 Glu Lys Gln Ser Thr Gln Gln Ser Gln Gln Ile Asp Ile Ala Gln Lys  
 545 550 555 560

Ala Lys Asp Leu Phe Gly Glu Glu Thr Val His Leu Val Asp Glu Asp  
                   565                                  570                                  575

<210> 6619  
 <211> 93  
 <212> PRT  
 <213> S.epidermidis

<400> 6619  
 Phe Met Thr Lys Gln Ala Asn Ala Ser Arg Leu Ser Arg Leu Phe Asn  
 1                  5                                  10                                  15  
 Val Ala Gly Phe Ile Val Asp Gly Tyr Asn Gly Ile Arg Tyr Asn Ala  
                   20                                  25                                  30  
 Lys Asn Lys Gln Leu Val Tyr Leu Ser Leu Gly Leu Ser Ala Leu Gly  
                   35                                  40                                  45  
 Thr Ile Ile Asp Phe Tyr Ile Ser Ile Lys Ser Ala Ser Lys Leu Arg  
                   50                                  55                                  60  
 Lys Leu Ser Ala Leu Gly Ser Phe Ala Ile Asn Gly Val Arg Leu Phe  
 65                                  70                                  75                                  80  
 Thr Ser Phe Lys Lys Val Arg Asp Glu Tyr Asp Tyr His  
                   85                                  90

<210> 6620  
 <211> 46  
 <212> PRT  
 <213> S.epidermidis

<400> 6620  
 Leu Ile Leu Leu Tyr Phe Lys Leu Lys Leu Leu Asp Lys Leu Tyr Lys  
 1                  5                                  10                                  15  
 Leu Leu Ile Thr Tyr Asp Lys His Phe Tyr Glu Asn Tyr Lys Asn Phe  
                   20                                  25                                  30  
 Asn Asn Tyr Ser Glu Phe Val Leu Tyr Asn Arg Val Cys Val  
                   35                                  40                                  45

<210> 6621  
 <211> 49  
 <212> PRT  
 <213> S.epidermidis

<400> 6621  
 Asn Leu Asn Asn Phe Thr Ser Asp Tyr Thr Ser Lys Phe His Asn Leu  
 1                  5                                  10                                  15  
 Asp Leu Tyr Tyr Leu Tyr Lys Asn Leu Lys Ser Lys Val Lys Asn  
                   20                                  25                                  30  
 His Ala Pro Leu Tyr Arg Thr His Ile Ile Asn Val Thr Glu Val Asp  
                   35                                  40                                  45  
 Ser

<210> 6622  
 <211> 43  
 <212> PRT  
 <213> S.epidermidis

<400> 6622

6619-6622 = 6620-6621

Lys Thr Tyr Asn Gln Phe Glu Ile Gln Thr Leu Phe Lys Ile Ser Ile  
 1 5 10 15  
 Phe Ile Phe Ile Ile Asp Tyr Val Tyr Met Arg Ile Arg Asn Glu Ser  
 20 25 30  
 Val Met Ile Gly Val Asn Lys Leu Thr His Arg  
 35 40

<210> 6623

<211> 347

<212> PRT

<213> S.epidermidis

<400> 6623

Arg Tyr Asn Asn Asn Val Leu Arg Phe His Ile Glu Val Lys Val His  
 1 5 10 15  
 Met Lys Ser Ile Thr Gln Ala Ser Phe Met Lys Gly Ile Met Phe Thr  
 20 25 30  
 Phe Thr Ile Ala Ile Ile Ser Tyr Ile Leu Ala Lys Phe Pro Ile Leu  
 35 40 45  
 His Thr Ile Gly Ala Leu Ala Ile Ala Ile Ile Phe Ala Met Ile Tyr  
 50 55 60  
 Arg Gln Val Ile Gly Tyr Pro Glu His Ile Arg Pro Gly Ile Thr Phe  
 65 70 75 80  
 Ala Ser Lys Arg Leu Leu Lys Phe Ala Ile Ile Leu Tyr Gly Leu Lys  
 85 90 95  
 Leu Asn Met Gly Asp Ile Leu Gly Lys Gly Trp Lys Leu Leu Ile  
 100 105 110  
 Asp Ile Ile Val Ile Ile Phe Ser Ile Ser Leu Thr Leu Leu Asn  
 115 120 125  
 Gln Ile Ile Lys Gly Asn Lys Asp Ile Ser Ile Leu Leu Gly Ile Gly  
 130 135 140  
 Thr Gly Val Cys Gly Ala Ala Ala Ile Ala Ala Thr Ala Pro Ile Leu  
 145 150 155 160  
 Lys Ser Lys Glu Lys Asp Ile Ala Ile Ser Val Gly Ile Ile Ala Leu  
 165 170 175  
 Val Gly Thr Ile Phe Ala Leu Ile Tyr Thr Ala Ile Glu Ala Ile Phe  
 180 185 190  
 Asn Ile Pro Thr Ile Thr Tyr Gly Ala Trp Thr Gly Ile Ser Leu His  
 195 200 205  
 Glu Ile Ala Gln Val Val Leu Ala Ala Gly Ile Gly Gly Ser Glu Ala  
 210 215 220  
 Met Thr Phe Ala Leu Leu Gly Lys Leu Gly Arg Val Phe Leu Leu Ile  
 225 230 235 240  
 Pro Leu Ser Ile Val Leu Ile Leu Tyr Met Arg Tyr Lys Ser His Ser  
 245 250 255  
 Ser Gln Val Gln Lys Ile Asp Ile Pro Tyr Phe Leu Ile Gly Phe  
 260 265 270  
 Ile Ile Met Ala Cys Ile Asn Thr Phe Val Pro Ile Pro Ser Leu Leu  
 275 280 285  
 Met Asn Ile Ile Asn Val Ile Thr Thr Leu Cys Met Leu Met Ala Met  
 290 295 300  
 Val Ala Leu Gly Leu Asn Ile Val Leu Lys Glu Val Ile Ser Lys Ala  
 305 310 315 320  
 Leu Lys Pro Phe Ile Val Ile Cys Ile Thr Ser Ile Cys Leu Ser Gly  
 325 330 335  
 Val Thr Leu Leu Val Thr Ser Ile Met Phe Lys

340

345

<210> 6624  
 <211> 45  
 <212> PRT  
 <213> S.epidermidis

<400> 6624  
 Arg Ser Leu Asn Gln Leu Lys Ile Asn Arg His Lys Lys Thr Thr Ile  
 1 5 10 15  
 Val Lys Asp Gly Gly Tyr Val Glu Cys Arg Leu Phe Phe Glu Phe Phe  
 20 25 30  
 Asn Asp Val Tyr Asp Ser Phe Asn Asp Phe Asp Asp Ser  
 35 40 45

<210> 6625  
 <211> 48  
 <212> PRT  
 <213> S.epidermidis

<400> 6625  
 Arg Arg Leu Asn Phe Tyr Ala Cys Lys Glu Arg Pro Asn Tyr Ser Asn  
 1 5 10 15  
 Ile Val Leu Thr Val Leu Arg Gly Glu Val Thr Val Pro Cys Thr Arg  
 20 25 30  
 Asn Pro Leu Tyr Ala Arg Leu Asn Ser Phe Val Glu Asp Val Phe Leu  
 35 40 45

<210> 6626  
 <211> 52  
 <212> PRT  
 <213> S.epidermidis

<400> 6626  
 Leu Tyr Leu Lys Gln Leu Gln Val Glu Arg Lys Cys Asn Asn Ile Tyr  
 1 5 10 15  
 Tyr Phe Lys Val Trp Asp Ile Ser Leu Tyr Ser Arg Leu Tyr Leu His  
 20 25 30  
 Leu Asn Arg Arg Arg Leu Asn Thr Leu Ile Tyr Glu Ser Ser Gln His  
 35 40 45  
 Arg Glu Phe His  
 50

<210> 6627  
 <211> 143  
 <212> PRT  
 <213> S.epidermidis

<400> 6627  
 Lys Val Val Lys Lys Gly Val Thr Tyr Lys Met Lys Lys Phe Phe Ile  
 1 5 10 15  
 Phe Leu Leu Ser Ser Leu Leu Val Leu Ala Ala Cys Gly Lys Asn Tyr  
 20 25 30  
 Glu Ile Ser Asp Ile Thr Ser Lys Phe Lys Lys Glu Gly Leu Ser Val  
 35 40 45  
 Glu Asn Leu Arg Lys Met Asp Arg Glu Asp Phe Gly Met Ala Pro Met





<211> 52  
 <212> PRT  
 <213> S.epidermidis

<400> 6631

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Ile | Arg | Lys | Gly | Leu | Ile | Phe | Leu | Lys | Tyr | Phe | Asn | Val | Lys | Leu |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| His | Met | Asn | Thr | Lys | Tyr | Phe | Gly | Glu | Thr | Leu | Glu | Gly | Thr | Gly | Gln |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Ala | Glu | Asp | Tyr | Arg | Leu | Lys | Leu | Ser | Pro | Lys | Lys | Ala | Ser | Gln | Gln |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Tyr | Glu | Val | Leu |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 50  |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6632  
 <211> 248  
 <212> PRT  
 <213> S.epidermidis

<400> 6632

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Gly | Val | Asn | Val | Lys | Met | Lys | Val | Lys | Ser | Pro | Gln | Ser | Ile | Tyr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Lys | Gly | His | Arg | Gln | Gln | Ala | Val | Leu | Leu | Leu | His | Ser | Phe | Thr |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Gly | Thr | Val | Arg | Asp | Val | Lys | His | Leu | Ala | Gln | Gln | Leu | Asn | Glu | Glu |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Phe | Thr | Cys | Tyr | Val | Pro | Ser | Tyr | Pro | Gly | His | Gly | Leu | Pro | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Lys | Glu | Phe | Thr | Gln | His | Asn | Ile | Asn | Asp | Trp | Trp | Glu | Gln | Val | Thr |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |
| Ala | Ala | Tyr | Gln | Phe | Leu | Arg | Asn | Glu | Gly | Tyr | Ser | Arg | Ile | Asn | Val |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Thr | Gly | Val | Ser | Leu | Gly | Gly | Leu | Phe | Thr | Leu | Arg | Leu | Ala | Glu | His |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Phe | Asp | Leu | Glu | Arg | Ile | Ala | Val | Met | Ser | Ala | Pro | His | Lys | Lys | Arg |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Glu | Ser | Glu | Ile | Ala | Trp | Arg | Leu | Glu | Arg | Tyr | Gly | His | Arg | Met | Asn |
|     |     | 130 |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Glu | Ile | Leu | Ser | Leu | Ser | Glu | Glu | Glu | Arg | Arg | His | Gln | Met | Glu | Thr |
| 145 |     |     |     |     | 150 |     |     |     | 155 |     |     |     |     |     | 160 |
| Ile | Leu | Ser | Tyr | Asp | Lys | Glu | Ile | Glu | Val | Phe | Gln | Gly | Val | Ile | Asp |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Glu | Ile | Met | Ala | Tyr | Leu | Ala | Asn | Ile | Thr | Val | Pro | Val | Asn | Ile | Met |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Tyr | Gly | Glu | Glu | Asp | Asp | Pro | Leu | Tyr | Ala | Gln | Ser | Ala | Gln | Tyr | Ile |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Tyr | Asp | Asn | Val | Asn | Ser | Gln | Asp | Lys | Glu | Leu | Leu | Lys | Phe | Glu | Lys |
|     | 210 |     |     |     |     | 215 |     |     |     |     | 220 |     |     |     |     |
| Ser | Gly | His | Leu | Met | Thr | Tyr | Gly | Asp | His | Ala | Tyr | Arg | Val | Glu | Gln |
| 225 |     |     |     |     | 230 |     |     |     |     | 235 |     |     |     |     | 240 |
| Ser | Ile | Ile | Gln | Phe | Phe | Ser | Lys |     |     |     |     |     |     |     |     |
|     |     |     |     | 245 |     |     |     |     |     |     |     |     |     |     |     |

<210> 6633  
 <211> 50  
 <212> PRT

<213> S.epidermidis

<400> 6633

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Asp Val Ile Asp Lys Thr Lys Thr Asn Gly Gln Phe His Phe Leu Val
1          5          10          15
Glu Leu Thr Val Leu Leu Tyr Lys Glu Cys Tyr Val Val Asp Ser Lys
          20          25          30
Tyr Leu Thr Pro Leu Asn Glu Arg Met Phe Asn Tyr Asp Leu Lys Leu
          35          40          45
Phe Ser
          50

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<210> 6634

<211> 86

<212> PRT

<213> S.epidermidis

<400> 6634

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Val Ser Val Asp Pro Lys Ile Ser Glu Trp Gly Glu Pro Ser Met Asn
1          5          10          15
Tyr Val Met Leu Phe Thr Cys Glu Phe Ile Ala Trp Ser Glu Ser Lys
          20          25          30
Pro Arg Arg Thr Glu Thr Ser Asn Tyr Pro Glu Glu Glu Lys Lys
          35          40          45
Ser Ile Ser Leu Asn Ser Gly Gln Thr Lys Thr Gly Arg Arg Pro Asn
          50          55          60
Pro Pro Ser Leu Leu Cys Trp Gly Leu Val Gly His Phe Phe Thr Glu
          65          70          75          80
Phe Pro Lys Glu Pro Leu
          85

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<210> 6635

<211> 110

<212> PRT

<213> S.epidermidis

<400> 6635

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Gly Gly Asn Glu Ile Met Arg Gly Gly Gly Asn Met Gln Gln Met Met
1          5          10          15
Lys Gln Met Gln Lys Met Gln Lys Lys Met Ala Gln Glu Gln Glu Lys
          20          25          30
Leu Lys Glu Glu Arg Val Ala Gly Thr Ala Gly Gly Gly Met Val Thr
          35          40          45
Val Thr Val Thr Gly His Lys Glu Val Val Asp Val Glu Ile Lys Glu
          50          55          60
Glu Ala Val Asp Pro Glu Asp Ile Glu Met Leu Gln Asp Leu Val Leu
          65          70          75          80
Ala Ala Thr Asn Glu Ala Met Asn Lys Ala Asp Glu Leu Thr Gln Gln
          85          90          95
Arg Leu Gly Lys His Thr Gln Gly Leu Asn Ile Pro Gly Met
          100          105          110

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<210> 6636

<211> 109

<212> PRT

<213> S.epidermidis

&lt;400&gt; 6636

Gly Leu Arg Phe Lys Ile Ser Tyr Ile Pro Leu Ala Ile Val Ile Glu  
 1 5 10 15  
 Thr Ser Ile Thr Ala Pro Ser Val Pro Ile Ser Thr Glu Ala Arg Lys  
 20 25 30  
 Thr Ser Leu Gly Gly Arg Val Arg Lys Val Ile Val Ser Tyr Phe Ile  
 35 40 45  
 Pro Phe Pro Pro Val Asn Leu Met Met Thr Ser Val Ile Pro Thr His  
 50 55 60  
 Lys Asn Val Pro Ile Ser Val Leu Thr Ile Val Ile Lys Val Arg Leu  
 65 70 75 80  
 Cys Gln Pro Val Thr Ser Ser Lys Val Lys Glu Val Glu Met Ile Ile  
 85 90 95  
 Ala Gln Val Ile Lys Lys Asn Lys Leu Ile Ala Pro Tyr  
 100 105

&lt;210&gt; 6637

&lt;211&gt; 507

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6637

Asn Lys Gly Glu Leu Ile Met Ile Tyr Thr Val Thr Thr Thr Leu Pro  
 1 5 10 15  
 Leu Ser His Gly Gly Arg Thr Gln Ala Leu Leu Arg Arg Ile Lys Leu  
 20 25 30  
 Leu Asp Glu Glu Phe Lys Ile Pro Ser Lys Ile Leu Thr Thr Asn Tyr  
 35 40 45  
 His Gly Asn Tyr Pro Ser Ile Tyr Lys Lys Tyr Arg Gln Glu Asn Lys  
 50 55 60  
 Val Thr Glu Asn Ile Gln Phe Glu Asn Met Tyr Glu Trp Leu Ser Asn  
 65 70 75 80  
 Phe Lys Leu Phe Lys Val Pro Lys Thr Leu Ile Thr Arg Asn Pro Lys  
 85 90 95  
 Tyr Ile Lys Thr Pro Arg Lys Ile Lys Gly Leu Ile Asp Lys Gln Gly  
 100 105 110  
 Lys Lys Ser Gly Leu Ile His Tyr Tyr Asn Asn Glu Cys His Val Arg  
 115 120 125  
 Ser Arg Lys Tyr Tyr Gly Gln Ser Asn Val Leu Glu Tyr Glu Asp Phe  
 130 135 140  
 Ile Ser Pro Thr Ser Gly Leu Lys Tyr Glu Arg His Gln Tyr Asn Leu  
 145 150 155 160  
 Tyr Gly Gln Leu His Arg Lys Glu Tyr Tyr Tyr Asp Asp Ser Ser Leu  
 165 170 175  
 Lys His Ser Asp Glu Leu Phe Asp Thr Glu Gly Ser Met Tyr Cys Lys  
 180 185 190  
 Arg Tyr Phe Lys Thr Lys Pro Asn Ser Lys Ile Asn Gly Val Glu Ile  
 195 200 205  
 Tyr Arg Asn Lys Lys Leu Tyr Lys Thr Phe Lys Asn Asp Lys Leu Leu  
 210 215 220  
 Ala Gln Phe Tyr Phe Gln Asn Arg Phe Lys Asn Gln Asp Ile Val Phe  
 225 230 235 240  
 Asn Asp Ala Arg Phe Leu Asp Lys Pro Leu Leu Lys Gln Thr His Gln  
 245 250 255  
 Thr Lys Asn Ile Leu Val Leu His Ser Ser His Leu Ser Gly Asp Gln

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Lys | Lys | Ser | Tyr | Arg | Phe | Ala | Leu | Asn | Gln | Ser | Lys | Asn | Val | Tyr |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Lys | Tyr | Ile | Val | Leu | Thr | His | Gln | Gln | Lys | His | Asp | Ile | Gln | Gln | His |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Phe | His | Ile | Ser | Asp | Asp | Gln | Phe | Gln | Leu | Val | Pro | His | Phe | Ile | Glu |
| 305 |     |     |     |     | 310 |     |     |     |     | 315 |     |     |     |     | 320 |
| Leu | Asp | Thr | Glu | Val | Glu | Gln | Asp | Ser | Ser | Asn | Asn | Gln | Asn | Arg | Phe |
|     |     |     | 325 |     |     |     |     |     | 330 |     |     |     |     | 335 |     |
| Ile | Tyr | Ile | Gly | Arg | Phe | Ser | Thr | Glu | Lys | Gln | Ile | Asp | His | Ile | Ile |
|     |     | 340 |     |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Arg | Ala | Tyr | His | Lys | Phe | Leu | Gln | Ser | Gly | Tyr | Gln | Thr | Glu | Leu | His |
|     | 355 |     |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |
| Leu | Phe | Gly | Arg | Asp | Glu | Asp | Asn | Gln | Ile | Pro | Leu | Met | Asn | Thr | Leu |
|     | 370 |     |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |
| Ile | Ser | Glu | Leu | Lys | Leu | Ser | Asp | Lys | Val | Lys | Ile | Phe | Lys | Tyr | Thr |
| 385 |     |     |     |     | 390 |     |     |     |     | 395 |     |     |     |     | 400 |
| Asn | Gln | Pro | Leu | Gln | Lys | Phe | Lys | Asn | Ser | Lys | Ala | Ser | Leu | Leu | Thr |
|     |     |     | 405 |     |     |     |     | 410 |     |     |     |     |     | 415 |     |
| Ser | Gln | Tyr | Glu | Gly | Phe | Gly | Leu | Thr | Leu | Met | Glu | Ser | Ile | Glu | Met |
|     |     | 420 |     |     |     |     |     | 425 |     |     |     |     | 430 |     |     |
| Gly | Cys | Pro | Val | Leu | Ser | Tyr | Asn | Val | Arg | Tyr | Gly | Pro | Ser | Glu | Ile |
|     | 435 |     |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |
| Ile | Gln | Asn | Gly | Ile | Asn | Gly | Tyr | Leu | Ile | Glu | Lys | Asn | Asp | Ile | Asp |
|     | 450 |     |     |     |     | 455 |     |     |     |     | 460 |     |     |     |     |
| Ser | Leu | Ser | Lys | His | Met | Ile | Asn | Ile | Ile | Glu | His | Pro | Leu | Gln | Lys |
| 465 |     |     |     |     | 470 |     |     |     |     | 475 |     |     |     |     | 480 |
| Val | Lys | Asn | Lys | Asp | Thr | Leu | Lys | Tyr | Asn | Ala | Ala | Val | Asn | Asn | Tyr |
|     |     |     | 485 |     |     |     |     | 490 |     |     |     |     |     | 495 |     |
| Lys | Gln | Leu | Met | Gln | Ser | Leu | Asp | Leu | Leu | Lys |     |     |     |     |     |
|     |     | 500 |     |     |     |     |     | 505 |     |     |     |     |     |     |     |

&lt;210&gt; 6638

&lt;211&gt; 132

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6638

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Lys | Lys | Glu | Glu | Ile | Met | Lys | Asn | Val | Ser | Pro | Phe | Ile | Tyr | Val | Lys |
| 1   |     |     |     | 5   |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Asp | Val | Asp | Lys | Ser | Leu | Cys | Tyr | Tyr | Lys | Asp | Val | Phe | Asn | Ala | Gln |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Thr | Glu | Ile | Leu | Met | Gly | Lys | Asp | Gly | Arg | Thr | Tyr | His | Ala | Gln | Leu |
|     | 35  |     |     |     |     | 40  |     |     |     |     |     | 45  |     |     |     |
| Ile | Ile | Gly | Asp | Glu | Thr | Phe | Val | His | Phe | Ser | Asp | Thr | Phe | His | Lys |
|     | 50  |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |     |
| His | Pro | Val | Ser | Lys | Asn | Pro | His | Leu | Ile | Ile | Glu | Cys | Asp | Ser | Leu |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Glu | Glu | Leu | Glu | Arg | Val | Tyr | Lys | Arg | Leu | Ile | Asp | Asp | Gly | Gly | His |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Ala | Lys | Val | Lys | Leu | Asn | Lys | Thr | Phe | Phe | Asn | Ala | Tyr | His | Ala | Glu |
|     |     | 100 |     |     |     |     |     | 105 |     |     |     | 110 |     |     |     |
| Val | Lys | Asp | Arg | Leu | Asn | Gly | Ile | Ile | Trp | Val | Phe | Asn | Tyr | Phe | Leu |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asp | Glu | His | Ile |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 130 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 6639  
 <211> 44  
 <212> PRT  
 <213> S.epidermidis

<400> 6639  
 Arg Ala Ile Leu Met Cys His Ser His Ile Ser Leu Leu Ser Gln Leu  
 1 5 10 15  
 Asp Thr Leu Leu Ser Thr Ile Met Asn Arg Val Gly His Thr Asp His  
 20 25 30  
 Lys Thr Ile Leu Gln Ile Tyr Arg His Val Thr Glu  
 35 40

<210> 6640  
 <211> 128  
 <212> PRT  
 <213> S.epidermidis

<400> 6640  
 Met Ile Lys Cys Val Cys Leu Val Glu Glu Lys Asn His Gln Leu Leu  
 1 5 10 15  
 Leu Val Gln Val Arg His Arg Asp Lys Tyr Tyr Phe Pro Gly Gly Lys  
 20 25 30  
 Ile Asp Glu Gly Glu Ser Leu Val Glu Ala Leu Gln Arg Glu Leu Lys  
 35 40 45  
 Glu Glu Leu Arg Leu Glu Leu Ala Lys Asp Glu Leu Glu Phe Ile Gly  
 50 55 60  
 Thr Ile Val Gly Glu Ala Tyr Pro Gln Pro Asn Met Leu Thr Glu Leu  
 65 70 75 80  
 Asn Gly Phe Lys Val Asn Arg Ala Ile Asp Trp Ser Lys Val Glu Thr  
 85 90 95  
 Asp His Glu Ile Thr Asp Met Lys Trp Phe Asp Ile Asn Asp Ser Glu  
 100 105 110  
 Asn Ile Ala Pro Ala Val Asn Thr Trp Ile Lys Glu Phe Ile Asn Asp  
 115 120 125

<210> 6641  
 <211> 86  
 <212> PRT  
 <213> S.epidermidis

<400> 6641  
 Ile Lys Glu Cys Arg Asn Met Lys Arg Thr Phe Leu Leu Thr Tyr Thr  
 1 5 10 15  
 Thr Val Ser Gly Lys Thr Tyr Thr Glu Phe Lys Thr Phe Glu Asn Gly  
 20 25 30  
 Pro Asp Tyr Asp Thr Cys Val Ser Arg Ile Ile Asp Glu Phe Asp Glu  
 35 40 45  
 Leu Ala Tyr Leu Tyr Ile Lys Lys Asp Val Val His Tyr Ile Asn Val  
 50 55 60  
 Asp His Ile Glu Ser Leu Asp Ile Glu Glu Val Thr Glu Gly Gln His  
 65 70 75 80  
 Ile Thr Tyr Asp Phe Glu  
 85

<210> 6642  
 <211> 130  
 <212> PRT  
 <213> S.epidermidis

<400> 6642  
 Ser Arg Asn Arg Ser Arg Pro Val Met Lys Lys Thr Lys Gly Ile Tyr  
 1 5 10 15  
 Glu Ser Glu Ile Ser Lys Ala Ile Thr Gln Trp Glu Lys Asp Phe Leu  
 20 25 30  
 Gly Arg Gly Ser Leu Ser Val Lys Thr Asp Ile Leu Arg Asp Met Val  
 35 40 45  
 Ile Val Ser Leu Gln Gly Ile Leu Thr Pro Ala Glu Tyr Arg Val Cys  
 50 55 60  
 Lys Thr Asn Glu Gly Leu Leu Asn Ile Lys Arg Thr Arg Ser Glu Leu  
 65 70 75 80  
 Val Glu Ser Gly Glu Glu Asp Leu Ser Arg Ile Ile Lys Asp Leu Thr  
 85 90 95  
 Gly Leu Asn Val Lys Ser Phe His Ser Asp Leu Ser Thr Ile Thr Gly  
 100 105 110  
 Glu Arg Val Met Ile Phe Lys Leu Glu Asp Arg Phe Asp Lys Ala Leu  
 115 120 125  
 His Glu  
 130

<210> 6643  
 <211> 46  
 <212> PRT  
 <213> S.epidermidis

<400> 6643  
 Thr Leu Tyr Arg Leu Ile Leu Val Leu Thr Thr Val Lys Ile Thr Leu  
 1 5 10 15  
 Ser Lys Thr Ile Gln Ile Thr Pro Glu Glu Lys Pro Asn Phe Phe Cys  
 20 25 30  
 Met Lys Phe Asn Tyr Lys Arg Val Ile Gln Lys Asn Gly Cys  
 35 40 45

<210> 6644  
 <211> 117  
 <212> PRT  
 <213> S.epidermidis

<400> 6644  
 Phe His Met Ser Tyr Glu Asn Ala Cys Asp Val Ile Cys Val His Glu  
 1 5 10 15  
 Asp Lys Val Asn Asn Ala Leu Ser Phe Leu Glu Asp Asp Lys Ser Lys  
 20 25 30  
 Lys Leu Leu Asn Ile Leu Glu Lys Ile Cys Asp Glu Lys Lys Leu Lys  
 35 40 45  
 Ile Ile Leu Ser Leu Ile Lys Glu Asp Glu Leu Cys Val Cys Asp Ile  
 50 55 60  
 Ser Leu Ile Leu Lys Met Ser Val Ala Ser Thr Ser His His Leu Arg  
 65 70 75 80  
 Leu Leu Tyr Lys Asn Glu Val Leu Asp Phe Tyr Lys Glu Gly Lys Met  
 85 90 95

6642 6643 6644

Ala Tyr Tyr Phe Ile Lys Asp Asp Glu Ile Arg Glu Phe Phe Ser Lys  
                   100                  105                  110  
 Asn Gln Glu Gly Phe  
                   115

<210> 6645  
 <211> 44  
 <212> PRT  
 <213> S.epidermidis

<400> 6645  
 Asn Ala Gln Arg Tyr Gly Gly Thr Pro Val Ala Lys Ala Thr Phe Trp  
 1                  5                  10                  15  
 Ser Val Thr Asp Ala Asp Val Arg Lys Arg Gly Asp Gln Thr Gly Leu  
                   20                  25                  30  
 Asp Thr Leu Val Val His Ala Val Asn Asp Glu Cys  
                   35                  40

<210> 6646  
 <211> 44  
 <212> PRT  
 <213> S.epidermidis

<400> 6646  
 Thr Val Ser Gly Thr Met Ala Ala Val Val Pro Ile Asp Val Pro Thr  
 1                  5                  10                  15  
 Ser Asn Leu Val Lys Gly Thr Met Ala Ile Asn Lys Ile Met Asn Gly  
                   20                  25                  30  
 Ile Asp Leu Lys Ile Leu Met Ile Gly Phe Asn Thr  
                   35                  40

<210> 6647  
 <211> 330  
 <212> PRT  
 <213> S.epidermidis

<400> 6647  
 Ser Arg Gly Gly Phe Gln Val Gln Lys Lys Tyr Ile Thr Ala Ile Ile  
 1                  5                  10                  15  
 Gly Thr Thr Ala Leu Ser Ala Leu Ala Ser Thr His Ala Gln Ala Ala  
                   20                  25                  30  
 Thr Thr His Thr Val Lys Ser Gly Glu Ser Val Trp Ser Ile Ser His  
                   35                  40                  45  
 Lys Tyr Gly Ile Ser Ile Ala Lys Leu Lys Ser Leu Asn Gly Leu Thr  
                   50                  55                  60  
 Ser Asn Leu Ile Phe Pro Asn Gln Val Leu Lys Val Ser Gly Ser Ser  
 65                  70                  75                  80  
 Ser Arg Ala Thr Ser Thr Asn Ser Gly Thr Val Tyr Thr Val Lys Ala  
                   85                  90                  95  
 Gly Asp Ser Leu Ser Ser Ile Ala Ala Lys Tyr Gly Thr Thr Tyr Gln  
                   100                  105                  110  
 Lys Ile Met Gln Leu Asn Gly Leu Asn Asn Tyr Leu Ile Phe Pro Gly  
                   115                  120                  125  
 Gln Lys Leu Lys Val Ser Gly Lys Ala Thr Ser Ser Ser Arg Ala Lys  
                   130                  135                  140  
 Ala Ser Gly Ser Ser Gly Arg Thr Ala Ile Tyr Thr Val Lys Tyr Gly





Thr Gly Ala Pro Met Ala Ile Gly Ala Met Ala Ala Phe Ser Ser Ala  
 210 215 220  
 Phe Met Asn Ser Ala Leu Phe His Arg Leu Lys Leu Gly Asp Arg Lys  
 225 230 235 240  
 Ser Thr Ile Ser Val Gly Ile Glu Pro Leu Ser Gln Ala Asp Ile Val  
 245 250 255  
 Ser Ala Asn Pro Ile Pro Ile Tyr Val Thr Asn Phe Phe Gly Gly Ala  
 260 265 270  
 Ile Ala Gly Ile Ile Ile Ala Trp Ser Gly Met Ile Asn Asn Ala Thr  
 275 280 285  
 Gly Thr Ala Thr Pro Ile Ala Gly Phe Leu Val Met Phe Gly Phe Asn  
 290 295 300  
 Ser Leu Thr Lys Val Ile Ile Tyr Gly Val Val Met Ala Ile Ile Gly  
 305 310 315 320  
 Thr Ile Ala Gly Ile Val Gly Ser Ile Val Phe Lys Lys Tyr Pro Ile  
 325 330 335  
 Ile Thr Lys Lys Gln Met Leu Glu Arg Asp Thr Thr Thr  
 340 345

&lt;210&gt; 6649

&lt;211&gt; 288

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6649

Ile Phe Arg Gly Asn Ser Phe Met Lys Lys Ile Leu Ser Phe Leu Ile  
 1 5 10 15  
 Val Ala Ile Leu Val Leu Ser Ala Cys Gly Gly Asn Asn Gly Lys Lys  
 20 25 30  
 Val Thr Ile Gly Val Ala Ser Asn Asp Thr Lys Ala Trp Glu Lys Val  
 35 40 45  
 Lys Glu Leu Ala Lys Lys Asp Asp Ile Asp Leu Glu Ile Lys His Phe  
 50 55 60  
 Ser Asp Tyr Asn Val Pro Asn Lys Ala Leu Ser Asp Gly Asp Ile Asp  
 65 70 75 80  
 Leu Asn Ala Phe Gln His Phe Ala Phe Leu Asp Gln Tyr Lys Lys Ala  
 85 90 95  
 His Lys Asp Thr Asn Ile Glu Ala Leu Ser Thr Thr Val Leu Ala Pro  
 100 105 110  
 Leu Gly Ile Tyr Ser Asp Lys Val Lys Asn Ile Lys Asp Val Lys Lys  
 115 120 125  
 Gly Ala Gln Val Ala Ile Pro Asn Asp Val Ser Asn Gln Ala Arg Ala  
 130 135 140  
 Leu Lys Leu Leu Glu Ser Ala Gly Leu Ile Lys Leu Lys Lys Asn Phe  
 145 150 155 160  
 Gly Leu Asn Gly Thr Lys Asp Ile Glu Ser Asn Pro Lys Asp Leu  
 165 170 175  
 Lys Ile Lys Ala Val Asp Ala Gln Gln Thr Ala Arg Ala Leu Ser Asp  
 180 185 190  
 Val Asp Ile Ser Val Ile Asn Asn Gly Val Ala Thr Lys Ala Gly Lys  
 195 200 205  
 Asp Ala Lys Lys Asp Pro Ile Tyr Leu Glu Lys Ala Ser Ser Asp Ala  
 210 215 220  
 Val Lys Pro Tyr Ile Asn Val Val Ala Val Asn Ser Lys Asp Lys Asp  
 225 230 235 240  
 Asn Lys Thr Tyr Lys Lys Ile Ile Glu Leu Tyr His Ser Lys Glu Ala

6649  
 288  
 PRT  
 S.epidermidis

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |     |     | 245 |     |     |     |     | 250 |     |     |     | 255 |     |     |     |
| Gln | Lys | Ala | Leu | Lys | Glu | Asp | Thr | Lys | Asp | Gly | Glu | Lys | Pro | Val | Asp |
|     |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |
| Leu | Ser | Lys | Lys | Glu | Ile | Glu | Glu | Ile | Glu | Asn | Glu | Leu | Ala | Lys | Lys |
|     |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |

<210> 6650  
 <211> 208  
 <212> PRT  
 <213> S.epidermidis

<400> 6650

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gly | Val | Ile | Met | Ile | Gln | Thr | Ile | Val | Thr | Ala | Ala | Ile | Leu | Tyr | Ile |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Ala | Thr | Ala | Val | Asp | Leu | Leu | Val | Ile | Leu | Leu | Ile | Phe | Phe | Ala | Lys |
|     |     |     | 20  |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Ala | Lys | Thr | Lys | Lys | Glu | Tyr | Arg | Asp | Ile | Tyr | Ile | Gly | Gln | Tyr | Val |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Gly | Ser | Val | Thr | Leu | Ile | Val | Val | Ser | Leu | Phe | Phe | Ala | Phe | Val | Leu |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Asn | Tyr | Val | Pro | Glu | Lys | Trp | Ile | Leu | Gly | Leu | Leu | Gly | Leu | Ile | Pro |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     | 80  |     |
| Ile | Tyr | Leu | Gly | Ile | Lys | Val | Ala | Ile | Tyr | Asp | Asp | Cys | Glu | Gly | Glu |
|     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |     |
| Lys | Arg | Ala | Lys | Lys | Glu | Leu | Asn | Glu | Lys | Gly | Leu | Ser | Lys | Leu | Val |
|     |     |     | 100 |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Gly | Thr | Val | Ala | Ile | Val | Thr | Ile | Ala | Ser | Cys | Gly | Ala | Asp | Asn | Ile |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Gly | Leu | Phe | Val | Pro | Tyr | Phe | Val | Thr | Leu | Ser | Val | Thr | Asn | Leu | Phe |
|     |     |     | 130 |     |     |     | 135 |     |     |     | 140 |     |     |     |     |
| Ile | Thr | Leu | Phe | Val | Phe | Leu | Ile | Leu | Ile | Phe | Phe | Leu | Val | Phe | Thr |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Ala | Gln | Lys | Leu | Ala | Asn | Ile | Pro | Gly | Val | Gly | Glu | Ile | Val | Glu | Lys |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| Phe | Ser | Arg | Trp | Ile | Met | Ala | Val | Ile | Tyr | Ile | Ala | Leu | Gly | Leu | Phe |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     | 190 |     |     |     |
| Ile | Ile | Ile | Glu | Asn | Asp | Thr | Ile | Gln | Thr | Ile | Leu | Gly | Phe | Ile | Phe |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |

<210> 6651  
 <211> 41  
 <212> PRT  
 <213> S.epidermidis

<400> 6651

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Lys | Ile | Met | Ile | Thr | Glu | Ile | Ile | Thr | Ser | Ile | Phe | Asn | Ser | Ile |
| 1   |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |     |
| Leu | Lys | Gln | Glu | Glu | Ile | Tyr | Leu | Asn | Asn | Ile | Glu | Gln | Leu | Ser |     |
|     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |     |
| Glu | Phe | Arg | Lys | Asp | Ile | Ile | Leu | Lys |     |     |     |     |     |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |

<210> 6652  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6652

Tyr Tyr Val Ile Ile Asn Lys Leu Leu His Asp Leu Thr Lys Leu His  
 1 5 10 15  
 Leu Ile Glu Asn Met Thr Ile Asn His Thr Tyr Phe Asn Leu Gln Asn  
 20 25 30  
 Lys Tyr Gly Ile Arg Arg Glu Ser  
 35 40

&lt;210&gt; 6653

&lt;211&gt; 224

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6653

Gly Gly Tyr Ile Asn Met Phe Gly Ser Ser Leu Asp Ser Ser Gln Leu  
 1 5 10 15  
 Leu Gln Ala Leu Tyr Glu Thr Leu Tyr Met Val Thr Val Ser Leu Val  
 20 25 30  
 Ile Gly Ala Leu Ile Gly Ile Pro Leu Gly Ile Leu Leu Val Val Thr  
 35 40 45  
 Arg Lys Asn Gly Ile Trp Ser Asn Thr Ile Leu His Gln Val Leu Asn  
 50 55 60  
 Pro Ile Ile Asn Ile Leu Arg Ser Ile Pro Phe Ile Ile Leu Leu Ile  
 65 70 75 80  
 Ala Ile Val Pro Phe Thr Lys Leu Leu Val Gly Thr Ser Ile Gly Thr  
 85 90 95  
 Thr Ala Ala Ile Val Pro Leu Thr Val Tyr Val Ala Pro Tyr Ile Ala  
 100 105 110  
 Arg Leu Val Glu Asn Ser Leu Leu Glu Val Asp Asp Gly Ile Ile Glu  
 115 120 125  
 Ala Ala Lys Ala Met Gly Ala Ser Pro Leu Gln Ile Ile Arg Tyr Phe  
 130 135 140  
 Leu Leu Pro Glu Ala Leu Gly Ser Leu Ile Leu Ala Ile Thr Thr Ala  
 145 150 155 160  
 Ile Ile Gly Leu Ile Gly Ser Thr Ala Met Ala Gly Ala Val Gly Gly  
 165 170 175  
 Gly Gly Ile Gly Asp Leu Ala Leu Val Tyr Gly Tyr Gln Arg Phe Asp  
 180 185 190  
 Thr Ile Val Ile Val Ile Thr Val Ile Val Leu Ile Ile Ile Val Gln  
 195 200 205  
 Ile Ile Gln Thr Leu Gly Asn Phe Ile Ala Arg Val Ile Arg Arg Asn  
 210 215 220

&lt;210&gt; 6654

&lt;211&gt; 233

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6654

Val Asn His Ile Lys Glu Ile Gly Val Asp Met Asn Phe Lys Tyr Met  
 1 5 10 15  
 Asn Ile Ala Lys Gly Ile Ile Pro Ile Leu Ile Ser Met Ile Ile Leu  
 20 25 30  
 Leu Ser Phe Ile Ser Thr His Val Leu Ala Gln Asn Gln Trp Leu Arg  
 35 40 45

Met Val Asp Leu Ser Val Gln Glu Trp Phe Ser Asn Gln Phe Gly Asp  
50 55 60  
Pro Asn Arg Val Phe Gly His Gly Phe Ile Asn Asn Ile Met Thr Phe  
65 70 75 80  
Cys Ala Thr Phe Gly Asp Val Lys Thr Ile Leu Ile Val Ala Thr Ile  
85 90 95  
Ile Ala Val Leu Leu Met Phe Tyr Lys Lys Val Pro Gln Ala Ile Trp  
100 105 110  
Leu Ile Ile Thr Met Thr Ser Gly Ala Leu Ile Asn Tyr Leu Ile Lys  
115 120 125  
Gln Thr Ile Glu Arg Ser Arg Pro Glu Asn His Leu Ile Val Asp Thr  
130 135 140  
Gly Trp Ser Phe Pro Ser Gly His Ser Asn Ile Asn Thr Leu Phe Phe  
145 150 155 160  
Leu Met Ile Met Ile Ile Ile Ile Pro Leu Ile Arg Gln Arg Ala Phe  
165 170 175  
Lys Phe Ile Ile Thr Ile Leu Ser Ile Val Phe Trp Ile Ser Val Leu  
180 185 190  
Ile Ser Arg Leu Tyr Phe His Ala His Tyr Phe Ser Asp Val Val Gly  
195 200 205  
Gly Val Ser Leu Ala Ile Ile Trp Val Ser Leu Phe Ile Leu Val Ser  
210 215 220  
Pro Leu Leu Asn Phe Trp Gly Glu Lys  
225 230

&lt;210&gt; 6655

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6655

Phe Lys Asn Ile Asn Pro Leu Ser Ile Ala Met Thr Ser Val Ile Lys  
1 5 10 15  
Asn Ile Asn Lys Ile Asn Ser Glu Leu Asn Ile Ala Tyr Pro Pro Ser  
20 25 30  
Gln Lys Ile Ser Lys Thr Ile Ile Lys Ser Leu Gln  
35 40

&lt;210&gt; 6656

&lt;211&gt; 490

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6656

Gly Ile Ile Met Gly Glu Phe Lys Gly Phe Met Lys Tyr Asp Lys Gln  
1 5 10 15  
Ser Leu Ser Glu Leu Ser Leu Val Asp Arg Leu Ser Asn His Glu Ala  
20 25 30  
Phe Gln Gln Arg Phe Thr Lys Glu Asp Ala Ser Ile Gln Gly Ala Arg  
35 40 45  
Cys Met Asp Cys Gly Thr Pro Phe Cys Gln Thr Gly Gln Ser Tyr Gly  
50 55 60  
Arg Glu Thr Ile Gly Cys Pro Ile Gly Asn Tyr Ile Pro Glu Trp Asn  
65 70 75 80  
Asp Leu Val Tyr His Gln Asp Phe Lys Ala Ala Tyr Glu Arg Leu Arg  
85 90 95



&lt;400&gt; 6657

Arg Gln Ile Ile Met Pro Leu Met Ile Trp Ala Thr His Val Leu Gln  
 1 5 10 15  
 Trp Thr Ile Gln Arg Val Ala Lys Pro Arg Gly Gln Ala Asn Pro Ile  
 20 25 30  
 Lys Leu Phe Ser Val Arg Ile Val Val Cys Asn Ser Thr Ile  
 35 40 45

&lt;210&gt; 6658

&lt;211&gt; 83

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6658

His Ile Val Ile Gln Phe Ser Met Phe Ile Phe Leu Pro Thr Arg Ile  
 1 5 10 15  
 Asn Tyr Thr Leu His Gly Cys Leu Ser Gln Gln Leu Phe Glu Ile Asn  
 20 25 30  
 Phe Ser Arg Leu Phe Asn Asp Ser Leu Ser Cys Phe Ala Gln Gln Ile  
 35 40 45  
 Asn Thr Ile Gln Thr Tyr Ser Arg Phe Asn Asn Ser Lys Asn Tyr Thr  
 50 55 60  
 Ile Lys Asn Asn Ser Asn Tyr Ser Gly Gly Lys Thr Glu Leu Phe Leu  
 65 70 75 80  
 Tyr Glu Ile

&lt;210&gt; 6659

&lt;211&gt; 87

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6659

Thr Tyr Asn Met Ser Pro Tyr Leu Asn Ile Ile Asp Val Thr Lys Arg  
 1 5 10 15  
 Val Thr Pro Asp Arg Gln Ile Glu Val Ile Gln Ile Thr Met Asn Gly  
 20 25 30  
 Leu Ser Ala Phe Glu Ile Thr Ser Phe Lys Thr Ile Phe Asn Pro Arg  
 35 40 45  
 Ala Thr Ile Ala Ile Asn Ile His Asn Val Val Ile Thr Phe Ile Ile  
 50 55 60  
 Phe Ile Ser Asn Glu Gly Ile Gly Thr Asn Val Leu Ile Gln Ala Ile  
 65 70 75 80  
 Ile Ile Asn Pro Ile Arg Lys  
 85

&lt;210&gt; 6660

&lt;211&gt; 56

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6660

Thr Arg Gly Met Arg Asn Ser Pro Asn Lys His Gly Glu Thr Lys Tyr  
 1 5 10 15  
 Arg Tyr Tyr Glu Lys Tyr Lys Asp Ser Leu Thr Asn Asn Trp Arg Arg  
 20 25 30

Val Ser Met Val Phe Arg Asn Asp Lys Gln Leu Gln Lys Val Ala Gln  
           35                  40                  45  
 Lys Arg Leu Asn Lys Met Ser Val  
           50                  55

<210> 6661  
 <211> 47  
 <212> PRT  
 <213> S.epidermidis

<400> 6661  
 Ser Phe Leu Ile Lys Leu Met Glu Phe Val Leu Ser Asn Arg Met Gln  
 1                  5                  10                  15  
 Ser Leu Phe Leu Val Gln Met Thr Thr Met Ser Ile Thr Glu Leu Asn  
           20                  25                  30  
 Pro Leu Ser Leu Phe Met Leu Ala Leu Ile Leu Thr Tyr Gln Ile  
           35                  40                  45

<210> 6662  
 <211> 161  
 <212> PRT  
 <213> S.epidermidis

<400> 6662  
 Asn Val Leu Ile Asp Gly Lys Phe Ile Asn Leu Tyr Gln Ser Asn Ile  
 1                  5                  10                  15  
 Glu Lys Val Asn Asp Asn Arg His Ser Asn Glu Thr Ser Ile His Asn  
           20                  25                  30  
 Asp Asp Tyr Lys Lys Ile Leu Asn Lys Val Leu Lys Ser Asp Ile Ile  
           35                  40                  45  
 Ile Phe Ser Thr Pro Leu Tyr Trp Tyr Ser Met Ser Ala Ser Leu Lys  
           50                  55                  60  
 Leu Phe Ile Asp Arg Trp Thr Glu Ser Leu Arg Asp Thr Gln Ile Asp  
 65                  70                  75                  80  
 Asn Phe Lys Glu Ile Met Ser Gln Lys Lys Tyr Leu Ile Leu Ile Ile  
           85                  90                  95  
 Gly Gly Asp Ser Pro Arg Ile Lys Ala Gln Pro Leu Val His Gln Phe  
           100                  105                  110  
 Lys Leu Ile Phe Glu Phe Met Asn Ile Thr His Phe Arg Phe Leu Ile  
           115                  120                  125  
 Gly Glu Gly Asn Lys Pro Phe Asp Val Leu Asn Asp Ser Gln Phe Met  
           130                  135                  140  
 Glu Glu Leu Ala Asn Thr Asn Leu Ala Leu Lys Lys Gly Asp Ile Tyr  
 145                  150                  155                  160  
 Asp

<210> 6663  
 <211> 43  
 <212> PRT  
 <213> S.epidermidis

<400> 6663  
 Gly Val Val Phe Val Leu Leu Lys Leu Glu Lys Thr Val Cys Glu Val  
 1                  5                  10                  15  
 Cys Phe Tyr Leu Asn Ala Lys Asn Arg Asp Asn His Ile Asp Tyr Leu

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<210> 6664
<211> 373
<212> PRT
<213> S.epidermidis
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|         |         |         |         |         |     |         |         |         |         |         |         |         |         |         |     |
|---------|---------|---------|---------|---------|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----|
| Gly 1   | Phe     | Lys     | Met     | Gln 5   | Ser | Lys     | Asn     | Phe     | Phe 10  | Lys     | Thr     | Pro     | Phe     | Thr 15  | Trp |
| Met     | Met     | Ile     | Ile     | Phe 20  | Ser | Cys     | Leu     | Phe 25  | Leu     | Gly     | Thr     | Leu     | Ile 30  | Phe     | Thr |
| Phe     | Phe     | Asn 35  | Asp     | Arg     | Phe | Tyr     | Asn 40  | Met     | Pro     | Ile     | Gly     | Gln 45  | Ile     | Thr     | Gln |
| Ile     | Thr 50  | Asp     | Ile     | Gln     | Ser | Gln 55  | Lys     | Val     | Thr     | Asp     | Glu 60  | His     | Lys     | Asn     | Lys |
| Asp 65  | Ile     | Lys     | Tyr     | Lys 70  | Glu | Lys     | Ile     | Thr     | Phe     | Lys 75  | Ile     | Leu     | Asn     | Gly 80  | Glu |
| Phe     | Lys     | Gly     | Gln 85  | Thr     | Thr | Thr     | Ile     | Pro     | His 90  | Gln     | Tyr     | Val     | Lys     | Ser 95  | Gln |
| Ala     | Asp     | Ser 100 | Glu     | Ser     | Phe | Ser     | Lys 105 | Asn     | Asp     | Lys     | Val     | Leu     | Leu 110 | His     | Ile |
| Ser     | Lys     | Asn 115 | Pro     | Lys     | Asp | Ala     | Thr 120 | Ile     | Ile     | Glu     | Lys     | Lys 125 | Arg     | Asp     | Thr |
| Ile     | Val 130 | Val     | Ile     | Ile     | Thr | Gly 135 | Leu     | Phe     | Leu     | Leu     | Thr 140 | Val     | Leu     | Val     | Val |
| Gly 145 | Lys     | Lys     | Val     | Gly 150 | Leu | Gln     | Ser     | Ile     | Leu     | Ser 155 | Leu     | Ile     | Val     | Asn 160 | Thr |
| Ile     | Ala     | Val     | Met 165 | Gly     | Ala | Ile     | Leu     | Ile     | His 170 | Asp     | Gln     | Tyr     | Gly     | Ala 175 | Ile |
| Ser     | Leu     | Phe 180 | Phe     | Leu     | Met | Thr     | Cys     | Ala 185 | Ile     | Ile     | Ile     | Ser     | Thr 190 | Ser     | Phe |
| Thr     | Leu 195 | Leu     | Leu     | Val     | Thr | Gly     | Trp 200 | His     | Ser     | Arg     | Thr     | Leu 205 | Ile     | Thr     | Ile |
| Val     | Ser 210 | Thr     | Leu     | Ile     | Gly | Thr 215 | Phe     | Leu     | Cys     | Val     | Gly 220 | Ile     | Thr     | Glu     | Val |
| Ile 225 | Ile     | Lys     | Phe     | Thr 230 | Gly | Asn     | Gly     | Ile     | Lys 235 | Tyr     | Glu     | Thr     | Ile     | Thr 240 |     |
| Phe     | Leu     | Thr     | Leu 245 | Pro     | Pro | Lys     | Asp     | Val 250 | Phe     | Leu     | Ala     | Ser     | Val 255 | Leu     | Ile |
| Gly     | Thr     | Leu     | Gly 260 | Ala     | Val | Met     | Asp 265 | Val     | Ser     | Ile     | Thr     | Ile     | Ala 270 | Ser     | Gly |
| Met     | Tyr 275 | Glu     | Ile     | Leu     | Lys | Arg     | Ser 280 | Pro     | Gln     | Ile     | Ser     | Met 285 | Lys     | Arg     | Trp |
| Ala     | Leu 290 | Ala     | Gly     | Arg     | His | Ile 295 | Gly     | Gln     | Asp     | Ile     | Met 300 | Gly     | Thr     | Met     | Thr |
| Asn 305 | Ile     | Leu     | Leu     | Phe 310 | Ser | Tyr     | Leu     | Ser     | Gly     | Ser 315 | Leu     | Pro     | Met     | Phe     | Leu |
| Ile     | Tyr     | Leu     | Lys 325 | Asn     | Ala | Asn     | Thr     | Ile     | Thr 330 | Tyr     | Thr     | Ile     | Ser     | Met 335 | Asn |
| Trp     | Ser     | Leu     | Glu 340 | Val     | Ala | Arg     | Ala     | Leu 345 | Thr     | Gly     | Gly     | Ile     | Gly 350 | Ile     | Val |
| Leu     | Thr 355 | Ile     | Pro     | Ile     | Thr | Ile 360 | Ala     | Leu     | Met     | Glu     | Leu     | Trp 365 | Phe     | Lys     | Leu |



Arg Gly Val Asn Gln  
370

<210> 6665  
<211> 88  
<212> PRT  
<213> S.epidermidis

<400> 6665  
Tyr Phe Arg Ile Gln Tyr Leu Ser Gly Gln Ala Ser Leu Asn Ser Glu  
1 5 10 15  
Ala Leu Ala Tyr Phe Ile Phe His Val Lys Gln His Ser Ile Phe Ile  
20 25 30  
His Ile Thr Phe Ser Phe Lys Val Leu Asn Gln Thr Ile Thr Phe Val  
35 40 45  
Asp His Lys Ser Ile Gly Thr Asp Tyr Leu Val Ile Ala Asn Leu His  
50 55 60  
Gln Ser His Tyr Tyr Glu Leu Ser Met His Leu Ile Pro Gly Lys Phe  
65 70 75 80  
Phe Leu Asp Leu Asn Pro Tyr Gln  
85

<210> 6666  
<211> 62  
<212> PRT  
<213> S.epidermidis

<400> 6666  
Ile Asn Phe Val Ile Tyr Pro Leu Leu Cys Gly Leu Phe Cys Ala Leu  
1 5 10 15  
Leu Glu Val Ile Asp Leu Trp Tyr Ala Lys Lys Ile Thr Lys Thr His  
20 25 30  
Ser Lys Asp Trp Arg Phe Asn Pro His Leu Ile Trp Met Met Phe Ile  
35 40 45  
Phe Ser Ala Val Met Gly Ile Ile Tyr Val Leu Leu Phe Lys  
50 55 60

<210> 6667  
<211> 50  
<212> PRT  
<213> S.epidermidis

<400> 6667  
Leu Ser Asn Val Val Leu Pro Asp Pro Lys Tyr Pro Leu Asn Thr Val  
1 5 10 15  
Thr Gly Ile Phe Ala Ile Ser Arg Thr Leu Ser Phe Val Asn Ser Asn  
20 25 30  
Tyr Tyr Val Leu His Ser Ile Glu Ser Ser Phe Phe Tyr Gln Tyr Ser  
35 40 45  
Ile Phe  
50

<210> 6668  
<211> 40  
<212> PRT  
<213> S.epidermidis

66667:66668

&lt;400&gt; 6668

Lys Ile Asn Val Ser Val Ile Tyr Lys His Lys Ser Arg Cys Leu Thr  
 1 5 10 15  
 Phe Thr Ile Ile Val Phe Leu Lys Ile Met Asn Val Ser Thr Glu Met  
 20 25 30  
 Tyr Tyr Ser Lys Leu Ser Ile Leu  
 35 40

&lt;210&gt; 6669

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6669

Asn Tyr Phe Val Leu Gln Arg Phe Phe Trp Lys Leu Arg Lys Lys Val  
 1 5 10 15  
 Ser Tyr Gln Pro Pro Thr Lys Gln Ala Trp Trp Val Gly Pro Ser Pro  
 20 25 30  
 Arg Phe Gly Leu Ala Ala Ile Lys Gly Asn Gly Phe Phe Phe Phe Phe  
 35 40 45  
 Leu Arg Val Ile Arg Cys Phe Ser Ser Pro Gly Phe Ala Phe  
 50 55 60

&lt;210&gt; 6670

&lt;211&gt; 44

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6670

Val His Ser Phe His Ser Ser Asp Leu Gly Ser Asp Asn Ile Pro His  
 1 5 10 15  
 Ile Lys Ile Phe Ile Leu Ser Cys Val Ala Lys Leu Thr Thr His Ile  
 20 25 30  
 Tyr Lys Leu Asp Asn Arg Tyr Phe Gly Phe Pro Lys  
 35 40

&lt;210&gt; 6671

&lt;211&gt; 57

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6671

Leu Glu Val Val Ala Ser Thr His Ser Asp Leu Leu Ala Ser Ile Ile  
 1 5 10 15  
 Leu Ile Ile Ile Leu Leu Gly Val Val Lys Met Ser Asp Ser Lys Thr  
 20 25 30  
 Leu Arg Gln Ile Cys Thr Pro Ile Leu Gln Asn Ser Ile Ser Asp Cys  
 35 40 45  
 Phe Glu Cys Ile Ala Ser Ala Phe Ser  
 50 55

&lt;210&gt; 6672

&lt;211&gt; 43

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

6668  
6669  
6670  
6671

&lt;400&gt; 6672

Asp Leu Pro Val Leu Met Lys Ile Ile Val Gly Lys Thr Gly Arg Lys  
 1 5 10 15  
 Tyr Ser Val Arg Leu Thr Ile Lys Asp Ser Leu Glu Glu Ile Lys Phe  
 20 25 30  
 Phe Asp Tyr Phe Ser Leu Met Leu Asn Tyr Lys  
 35 40

&lt;210&gt; 6673

&lt;211&gt; 307

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6673

Asn Lys Thr Val Phe Ile Leu Leu Asn Gly Gly Lys Ser Thr Met Asp  
 1 5 10 15  
 Ile Lys Gln Leu Arg Tyr Phe Val Glu Val Ala Arg Arg Glu His Ile  
 20 25 30  
 Ser Asp Ala Ala Leu Glu Leu Asn Ile Ala Gln Ser Ala Ile Ser Arg  
 35 40 45  
 Gln Ile Thr Gln Leu Glu Lys Glu Leu Gly Val Thr Leu Phe Lys Arg  
 50 55 60  
 Ser Gly Arg Asn Ile Ile Leu Thr Val Glu Gly Arg Gln Leu Leu Ser  
 65 70 75 80  
 Gln Ala Thr Gln Ile Leu Glu Leu Met Asp Lys Thr Ile His Ser Phe  
 85 90 95  
 Gln Gln His Val Ser His Asn Gln Gln Thr Ile Tyr Ile Gly Tyr Glu  
 100 105 110  
 Glu Ser Asp Ala Ser Gln Met Ile Leu Pro Leu Ile Gln Thr Phe Glu  
 115 120 125  
 Gln Gln Ser Asn Ser Thr Met Ile Pro Gln Leu Thr Lys His Asp Lys  
 130 135 140  
 Leu Leu Asp Gln Ile Leu Ser Asn Gln Leu Asp Leu Ala Ile Thr Glu  
 145 150 155 160  
 Phe Thr Pro Val Leu Glu Arg Glu Thr His Leu Arg Val Met Pro Leu  
 165 170 175  
 Phe Glu Glu Asn Tyr Tyr Met Tyr Val Pro Lys Ser His Pro Leu Ala  
 180 185 190  
 Met Thr Val His Pro Pro Leu Ser Gln Phe Thr Asn Gln Ser Leu Tyr  
 195 200 205  
 Cys Leu Glu Pro Met Thr Ser Ser Ile Lys Ser Lys Leu Ile Glu Lys  
 210 215 220  
 Thr Lys Ala Gln Val Arg Met Ile Ser Asp Met Lys Leu Ala Gln His  
 225 230 235 240  
 Ile Leu Ser His Asn Lys Gly Phe Ile Ile Ser Ser Gln Asn Ser Leu  
 245 250 255  
 Leu Tyr Asp His Val Asn Trp Thr Lys Ile Pro Leu Asn His Thr Glu  
 260 265 270  
 Leu Lys Arg Met Leu Cys Val Val Met Arg Lys Asp Asn Lys Lys Asn  
 275 280 285  
 Asp Ile Asn Ile Ala Trp Asn Leu Ile Cys Thr Leu Leu Asn Lys Ser  
 290 295 300  
 Thr Ile Tyr  
 305

&lt;210&gt; 6674

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6674

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Leu Asp Lys Val Asn Tyr Phe Leu Lys Ala Leu Val Leu Val Ile Met
1          5          10          15
Leu Arg Cys Thr Met Asn Tyr Leu Leu Pro Ser Pro Asp Thr Ile Thr
          20          25          30
Phe Glu Ile Leu Asp Gly Leu Ala Phe Gly Val Leu Thr Val Phe Leu
          35          40          45
Ile Asn Trp Ile Ile Gly Ile Phe Lys Lys Tyr Ser Gln Lys
          50          55          60

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&lt;210&gt; 6675

&lt;211&gt; 47

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6675

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Lys Phe Gln Phe Ser Asn Leu Ser Ile Tyr Leu Arg Tyr Gln Gln Asn
1          5          10          15
Thr Lys Pro Leu Thr Thr Leu Leu Asn Gln Gln Ala Asp Lys Cys Cys
          20          25          30
Asn Pro Asn Leu Gly Leu His Pro Cys Ile Asn Ile Cys Leu Asn
          35          40          45

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&lt;210&gt; 6676

&lt;211&gt; 341

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6676

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Val Ile Glu Phe Lys Asn Val Asn Lys Val Phe Arg Lys Lys Arg Glu
1          5          10          15
Thr Ile Gln Ala Leu Lys Asn Val Ser Phe Lys Ile Asp Gln His Asp
          20          25          30
Ile Phe Gly Val Ile Gly Tyr Ser Gly Ala Gly Lys Ser Thr Leu Val
          35          40          45
Arg Leu Val Asn Gln Leu Glu Thr Val Ser Asp Gly Gln Val Ile Val
          50          55          60
Asp Gly His Glu Ile Asp Thr Tyr Lys Glu Lys Asp Leu Arg Asp Ile
          65          70          75          80
Lys Lys Asp Ile Gly Met Ile Phe Gln His Phe Asn Leu Leu Asn Ser
          85          90          95
Lys Ser Val Tyr Lys Asn Val Ala Met Pro Leu Ile Leu Ser Lys Thr
          100          105          110
Asn Lys Lys Glu Ile Lys Glu Lys Val Asp Glu Met Leu Glu Phe Val
          115          120          125
Gly Leu Ala Asp Lys Lys Asp Gln Phe Pro Asp Glu Leu Ser Gly Gly
          130          135          140
Gln Lys Gln Arg Val Ala Ile Ala Arg Ala Leu Val Thr His Pro Lys
          145          150          155          160
Ile Leu Leu Cys Asp Glu Ala Thr Ser Ala Leu Asp Pro Ala Thr Thr
          165          170          175

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Ser Ser Ile Leu Asn Leu Leu Ser Asn Val Asn Arg Thr Phe Gly Val  
 180 185 190  
 Thr Ile Met Met Ile Thr His Glu Met Ser Val Ile Gln Lys Ile Cys  
 195 200 205  
 His Arg Val Ala Val Met Glu Asn Gly Glu Val Ile Glu Met Gly Thr  
 210 215 220  
 Val Lys Asp Val Phe Ser His Pro Gln Thr Asn Thr Ala Lys Asn Phe  
 225 230 235 240  
 Val Ser Thr Val Ile Asn Thr Glu Pro Ser Lys Glu Leu Arg Ala Ser  
 245 250 255  
 Phe Asn Ser Arg Lys Asp Ser Asn Phe Thr Asp Tyr Lys Leu Phe Leu  
 260 265 270  
 Asp Ser Glu Gln Ile Gln Leu Pro Ile Leu Asn Glu Leu Ile Asn Glu  
 275 280 285  
 His His Leu Asn Val Asn Val Leu Phe Ser Ser Met Ser Glu Ile Gln  
 290 295 300  
 Asp Glu Thr Val Cys Tyr Leu Trp Leu Arg Phe Glu His Asp Glu Ser  
 305 310 315 320  
 Phe Asn Asp Phe Lys Leu Thr Asp Tyr Leu Ser Lys Arg His Ile Arg  
 325 330 335  
 Tyr Glu Glu Val Ile  
 340

<210> 6677  
 <211> 44  
 <212> PRT  
 <213> S.epidermidis

<400> 6677  
 Ile Pro Ile Ser Phe Ser Lys Phe Phe Asp Leu Ile Ala Asn Ile His  
 1 5 10 15  
 Cys Phe Lys Leu Leu Asn Tyr Asp Leu Lys Ser Phe Asn Ile Ile Ile  
 20 25 30  
 Lys Ser Asn Gln Val Phe Ser Ile Lys Ala Ile Lys  
 35 40

<210> 6678  
 <211> 63  
 <212> PRT  
 <213> S.epidermidis

<400> 6678  
 Lys Lys Tyr Ser Cys Leu Tyr Lys Arg Gly Ser Leu Thr Val Pro Leu  
 1 5 10 15  
 Asn Thr Ser His Leu Tyr Lys Ile Ser Leu Thr Ser Thr Ile Ile Ser  
 20 25 30  
 Thr Met Ile Tyr Ile Ser Lys Phe Tyr Tyr Ala Ile Asn Thr Tyr Phe  
 35 40 45  
 Pro Leu Tyr Leu Ser Pro Met Leu His Asn Arg Ser Asn Val Ile  
 50 55 60

<210> 6679  
 <211> 65  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6679

Glu Ile Asp Ser Asp Phe Ser Glu Leu Asp Thr Leu Pro Asp Ser Asp  
 1 5 10 15  
 Lys Asn Ser Leu Val Asp Val Leu Phe Asp Ser Ile Ser Asp Leu Leu  
 20 25 30  
 Phe Val Leu Leu Ser Asp Val Ile Glu Leu Asp Ser Asp Arg Asp Glu  
 35 40 45  
 Leu Ile Glu Ser Phe Ala Asp Ser Asp Trp Phe Lys Leu Ala Val Val  
 50 55 60  
 Leu  
 65

&lt;210&gt; 6680

&lt;211&gt; 325

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6680

Leu Phe Leu Ser Thr Tyr Val Ile Ser Val Tyr Lys Ser Lys Ile Leu  
 1 5 10 15  
 Arg Lys Met Glu Leu Phe Met Ser Glu Lys Glu Ile Trp Asp Lys Val  
 20 25 30  
 Leu Glu Ile Ala Gln Glu Arg Ile Ser Asn Thr Ser Tyr Gln Thr Phe  
 35 40 45  
 Ile Lys Asp Thr Gln Leu Tyr Ser Leu Lys Asn Asp Glu Ala Ile Ile  
 50 55 60  
 Leu Val Ser Leu Pro Phe Asn Ala Ser Trp Leu Asn Gln Arg Tyr Ser  
 65 70 75 80  
 Glu Ile Met Gln Ala Ile Ile Tyr Asp Val Ile Gly Tyr Glu Val Lys  
 85 90 95  
 Pro His Phe Ile Ser Glu Asp Glu Leu Ala Ser Tyr Asn Asn Val Asn  
 100 105 110  
 Thr Gln Glu Val Gln Glu Pro Gln Val Gln His Ser Ser Ile Asp Asp  
 115 120 125  
 Lys Thr Trp Gly Lys Glu Gln Phe Asn Met His Asn Thr Phe Asp Thr  
 130 135 140  
 Phe Val Ile Gly Pro Gly Asn Arg Phe Pro His Ala Ala Ser Leu Ala  
 145 150 155 160  
 Val Ala Glu Ala Pro Ala Glu Ala Tyr Asn Pro Leu Phe Ile Tyr Gly  
 165 170 175  
 Gly Val Gly Leu Gly Lys Thr His Leu Met His Ala Ile Gly His His  
 180 185 190  
 Val Leu Ser Asn Lys Pro Asn Ala Lys Val Ile Tyr Thr Ser Ser Glu  
 195 200 205  
 Lys Phe Thr Asn Glu Phe Ile Lys Ser Ile Arg Asp Asn Glu Thr Glu  
 210 215 220  
 Ala Phe Arg Glu Lys Tyr Arg Lys Ile Asp Val Leu Leu Ile Asp Asp  
 225 230 235 240  
 Ile Gln Phe Ile Gln Asn Lys Glu Gln Thr Gln Glu Glu Phe Phe His  
 245 250 255  
 Thr Phe Asn Glu Leu His Gln Asn Asn Lys Gln Ile Val Ile Ser Ser  
 260 265 270  
 Asp Arg Pro Pro Lys Glu Ile Ala Lys Leu Glu Asp Arg Leu Arg Ser  
 275 280 285  
 Arg Phe Glu Trp Gly Leu Ile Val Asp Ile Thr Pro Pro Asp Tyr Lys  
 290 295 300

Thr Arg Met Ala Ile Leu Gln Lys Lys Leu Lys Lys Lys Ile Leu Ile  
 305 310 315 320  
 Phe Arg Gln Lys Leu  
 325

<210> 6681  
 <211> 57  
 <212> PRT  
 <213> S.epidermidis

<400> 6681  
 Leu Leu Leu Ser Phe Val Phe Glu His Ala Ala Ser Val Lys Asp Asn  
 1 5 10 15  
 Ala Ser Ile Lys Tyr Val Met Thr Leu Phe Phe Ile Glu Leu Ser Asn  
 20 25 30  
 Ser Phe Tyr Val Ser Ile Ile Lys Gln Cys Phe Lys Phe Ile His Leu  
 35 40 45  
 Leu Glu Tyr His Leu Ser Lys Asn Ile  
 50 55

<210> 6682  
 <211> 329  
 <212> PRT  
 <213> S.epidermidis

<400> 6682  
 Lys Val Leu Ser Ser Phe Leu Met Leu Ser Ile Ile Ser Ser Leu Leu  
 1 5 10 15  
 Thr Ile Cys Val Ile Phe Leu Val Arg Met Leu Tyr Ile Lys Tyr Thr  
 20 25 30  
 Gln Asn Ile Met Ser His Lys Ile Trp Leu Leu Val Leu Val Ser Thr  
 35 40 45  
 Leu Ile Pro Leu Ile Pro Phe Tyr Lys Ile Ser Asn Phe Thr Phe Ser  
 50 55 60  
 Lys Asp Met Met Asn Arg Asn Val Ser Asp Thr Thr Ser Ser Val Ser  
 65 70 75 80  
 His Met Leu Asp Gly Gln Gln Ser Ser Val Thr Lys Asp Leu Ala Ile  
 85 90 95  
 Asn Val Asn Gln Phe Glu Thr Ser Asn Ile Thr Tyr Met Ile Leu Leu  
 100 105 110  
 Ile Trp Val Phe Gly Ser Leu Leu Cys Leu Phe Tyr Met Ile Lys Ala  
 115 120 125  
 Phe Arg Gln Ile Asp Val Ile Lys Ser Ser Ser Leu Glu Ser Ser Tyr  
 130 135 140  
 Leu Asn Glu Arg Leu Lys Val Cys Gln Ser Lys Met Gln Phe Tyr Lys  
 145 150 155 160  
 Lys His Ile Thr Ile Ser Tyr Ser Ser Asn Ile Asp Asn Pro Met Val  
 165 170 175  
 Phe Gly Leu Val Lys Ser Gln Ile Val Leu Pro Thr Val Val Glu  
 180 185 190  
 Thr Met Asn Asp Lys Glu Ile Glu Tyr Ile Ile Leu His Glu Leu Ser  
 195 200 205  
 His Val Lys Ser His Asp Leu Ile Phe Asn Gln Leu Tyr Val Val Phe  
 210 215 220  
 Lys Met Ile Phe Trp Phe Asn Pro Ala Leu Tyr Ile Ser Lys Thr Met  
 225 230 235 240

Met Asp Asn Asp Cys Glu Lys Val Cys Asp Arg Asn Val Leu Lys Ile  
                           245                          250                          255  
 Leu Asn Arg His Glu His Ile Arg Tyr Gly Glu Ser Ile Leu Lys Cys  
                           260                          265                          270  
 Ser Ile Leu Lys Ser Gln His Ile Asn Asn Val Ala Ala Gln Tyr Leu  
                           275                          280                          285  
 Leu Gly Phe Asn Ser Asn Ile Lys Glu Arg Val Lys Tyr Ile Ala Leu  
                           290                          295                          300  
 Tyr Asp Ser Met Pro Lys Pro Asn Arg Asn Lys Arg Ile Val Ala Tyr  
 305                          310                          315                          320  
 Ile Val Cys Ser Ile Ser Ser Phe Thr  
                           325

<210> 6683  
 <211> 46  
 <212> PRT  
 <213> S.epidermidis

<400> 6683  
 Thr Asn Ile Ser Thr Met Lys Asn Val Leu Lys Gln Glu Asn Lys Tyr  
 1                          5                          10                          15  
 Val Ser Lys Glu Leu Lys Ser Lys Asn Thr Lys Ser Lys Ser Met Ile  
                           20                          25                          30  
 Ile Leu Ser Glu Ser Ile Asp Thr Asn Phe Lys Asn Leu Phe  
                           35                          40                          45

<210> 6684  
 <211> 50  
 <212> PRT  
 <213> S.epidermidis

<400> 6684  
 Tyr Tyr Ser Ser Tyr Tyr Ser Phe His Ile Ser Met Val Leu Leu Lys  
 1                          5                          10                          15  
 Ile Pro Ile Lys Lys Val Ala Tyr Ala Leu Lys Ile Lys Val Ile Thr  
                           20                          25                          30  
 Ser Phe Ser Leu Asn Leu Met Tyr Met Asp Leu Leu Phe Phe Asn Leu  
                           35                          40                          45  
 Phe Leu  
                           50

<210> 6685  
 <211> 321  
 <212> PRT  
 <213> S.epidermidis

<400> 6685  
 Leu Val Ser Ser Ile Asp Thr Lys Arg Arg Ile Ile Met Lys Lys Ser  
 1                          5                          10                          15  
 Val Arg Leu Tyr Asn Met Ile Glu Tyr Cys Asn Glu Asn Arg Asn Phe  
                           20                          25                          30  
 Lys Leu Asn Asp Leu Met Ser Glu Phe Asn Ile Ser Arg Ser Thr Ala  
                           35                          40                          45  
 Leu Arg Asp Ile Lys Glu Ile Glu Ala Leu Gly Val Pro Leu Tyr Ser  
                           50                          55                          60  
 Asn Pro Gly Lys Asn Gly Gly Tyr Thr Ile Ile Gly Asn Arg Asp Gln





Lys Thr Lys Arg Ser Asn Asn Gln  
130 135

<210> 6687  
<211> 89  
<212> PRT  
<213> S.epidermidis

<400> 6687  
Arg Arg Gln Ser Ile Met Phe Gly Leu Ile Gly Met Ile Ile Val Gly  
1 5 10 15  
Gly Ile Ile Gly Trp Ile Ala Gly Leu Ile Leu Gly Lys Asp Val Pro  
20 25 30  
Gly Gly Ile Leu Gly Asn Ile Ile Ala Gly Ile Val Gly Ser Trp Val  
35 40 45  
Gly Thr Met Ile Leu Gly Glu Trp Gly Pro Gln Leu Gly Lys Ile His  
50 55 60  
Ile Phe Pro Ala Leu Leu Gly Ser Ile Ile Leu Ile Phe Ile Ile Ser  
65 70 75 80  
Leu Ile Leu Lys Ala Leu Arg Lys Lys  
85

<210> 6688  
<211> 413  
<212> PRT  
<213> S.epidermidis

<400> 6688  
Val Lys Phe Leu Ala Ser Gln Leu Phe Lys Gly Gly Phe Phe Ile Asp  
1 5 10 15  
Tyr Leu Gly Val Asp Ile Ser Lys Arg Ser Ser Val Val Ala His Tyr  
20 25 30  
Lys Asn Gly Lys Phe Gln Lys Glu Phe Phe Ile Gln Asn Asn Lys Asn  
35 40 45  
Gly Tyr Asn Tyr Leu Leu Lys Tyr Leu Asn Asp Leu Asp His Pro Gln  
50 55 60  
Leu Ile Phe Glu Ser Thr Gly Ile Tyr Ser Arg Gly Met Glu Arg Phe  
65 70 75 80  
Cys Cys Val Asn Gln Ile Asn Tyr Ile Gln Met Asn Pro Leu Glu Ala  
85 90 95  
Lys Phe Lys Thr Ser Ala Leu Arg Ser Trp Lys Thr Asp Gln Ala Asp  
100 105 110  
Ala His Lys Leu Ala Cys Leu Gly Pro Thr Leu Lys Gln Thr Gly Ser  
115 120 125  
Leu Pro Ile His Glu Leu Ile Phe Phe Glu Leu Arg Glu Arg Ala Arg  
130 135 140  
Phe His Leu Glu Ile Glu Asn Glu Gln Asn Arg Leu Lys Phe Gln Ile  
145 150 155 160  
Leu Glu Leu Leu His Gln Thr Phe Pro Gly Leu Glu Arg Leu Phe Ser  
165 170 175  
Ser Arg Tyr Ser Ile Ile Ala Leu Asn Ile Ala Glu Ile Phe Thr His  
180 185 190  
Pro Asp Val Val Leu Asp Ile Asp Lys Asp Val Leu Ile Thr His Ile  
195 200 205  
Phe Asn Ser Thr Asp Lys Gly Met Ser Met Asp Lys Ala Thr Lys Tyr  
210 215 220

6687 6688 6689

Ala Leu Gln Leu Arg Val Ile Ala Gln Glu Ser Tyr Pro Asn Val Asp  
 225 230 235 240  
 Arg His Ser Phe Leu Val Glu Lys Leu Arg Leu Leu Ile Gln Gln Leu  
 245 250 255  
 Lys Gln Ser Ile His His Leu Lys Gln Leu Asp Asp Ala Met Ile Gln  
 260 265 270  
 Leu Ala Gln Gln Leu Asp Tyr Phe Glu Asn Ile His Ser Ile Pro Gly  
 275 280 285  
 Ile Gly Lys Leu Ser Thr Ala Met Ile Ile Gly Glu Ile Gly Asp Ile  
 290 295 300  
 Lys Arg Phe Lys Ser Asn Lys Gln Leu Asn Ala Phe Val Gly Ile Asp  
 305 310 315 320  
 Ile Lys Arg Tyr Gln Ser Gly His Thr His Cys Arg Asp Thr Ile Asn  
 325 330 335  
 Lys Arg Gly Asn Lys Lys Ala Arg Lys Leu Leu Phe Trp Val Ile Met  
 340 345 350  
 Asn Ile Ile Arg Gly Gln His His Tyr Asp Asn His Val Val Asp Tyr  
 355 360 365  
 Tyr Tyr Lys Leu Arg Lys Gln Pro Asn Glu Lys Pro His Lys Thr Ala  
 370 375 380  
 Ile Ile Ala Cys Ile Asn Arg Leu Leu Lys Thr Ile His Tyr Leu Val  
 385 390 395 400  
 Met Asn His Lys Leu Tyr Asp Tyr Gln Met Ser Pro His  
 405 410

<210> 6689

<211> 338

<212> PRT

<213> S.epidermidis

<220>

<221> UNSURE

<222> (332), (334)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 6689

Val Lys Phe Leu Ala Ser Gln Leu Phe Lys Gly Gly Phe Phe Ile Asp  
 1 5 10 15  
 Tyr Leu Gly Val Asp Ile Ser Lys Arg Ser Ser Val Val Ala His Tyr  
 20 25 30  
 Lys Asn Gly Lys Phe Gln Lys Glu Phe Phe Ile Gln Asn Asn Lys Asn  
 35 40 45  
 Gly Tyr Asn Tyr Leu Leu Lys Tyr Leu Asn Asp Leu Asp His Pro Gln  
 50 55 60  
 Leu Ile Phe Glu Ser Thr Gly Ile Tyr Ser Arg Gly Met Glu Arg Phe  
 65 70 75 80  
 Cys Cys Val Asn Gln Ile Asn Tyr Ile Gln Met Asn Pro Leu Glu Ala  
 85 90 95  
 Lys Phe Lys Thr Ser Thr Leu Arg Ser Trp Lys Thr Asp Gln Ala Asp  
 100 105 110  
 Ala His Lys Leu Ala Cys Leu Gly Pro Thr Leu Lys Gln Thr Asp Asn  
 115 120 125  
 Leu Pro Ile His Glu Leu Ile Phe Phe Glu Leu Arg Glu Arg Val Arg  
 130 135 140  
 Phe His Leu Glu Ile Glu Asn Glu Gln Asn Arg Leu Lys Phe Gln Ile  
 145 150 155 160

Leu Glu Leu Phe His Gln Thr Phe Pro Gly Leu Glu Arg Leu Phe Ser  
 165 170 175  
 Ser Arg Tyr Ser Ile Ile Ala Leu Asn Ile Ala Glu Ile Phe Thr His  
 180 185 190  
 Pro Asp Met Val Leu Asp Ile Asp Lys Glu Val Leu Ile Thr His Ile  
 195 200 205  
 Phe Asn Ser Thr Asp Lys Gly Met Ser Met Asp Lys Ala Thr Lys Tyr  
 210 215 220  
 Ala Leu Gln Leu Arg Val Ile Ala Gln Glu Ser Tyr Pro Asn Val Asp  
 225 230 235 240  
 Arg His Ser Phe Leu Val Glu Lys Leu Arg Leu Leu Ile Gln Gln Leu  
 245 250 255  
 Lys Gln Ser Ile His His Leu Lys Gln Leu Asp Asp Ala Met Ile Gln  
 260 265 270  
 Leu Ala Gln Gln Leu Asp Tyr Phe Glu Asn Ile His Ser Ile Pro Gly  
 275 280 285  
 Ile Gly Lys Leu Ser Thr Ala Met Ile Ile Gly Glu Ile Gly Asp Ile  
 290 295 300  
 Lys Arg Phe Lys Ser Asn Lys Gln Leu Asn Ala Phe Val Gly Ile Asp  
 305 310 315 320  
 Ile Lys Arg Asp Pro Gly Thr Ser Tyr Thr Phe Xaa Ile Xaa Val Arg  
 325 330 335  
 Gln Arg

<210> 6690

<211> 181

<212> PRT

<213> S.epidermidis

<400> 6690

Phe Ser Thr Phe Asn Phe Phe Leu Leu Ser Ala Cys Thr Ile Asn Ile  
 1 5 10 15  
 Glu Arg Asp Glu Glu Asn Ser Glu Lys Asn Lys Gln Lys Glu Asn Thr  
 20 25 30  
 His Thr Asp Ser Asn Asn Thr Ser Ser Asn Glu Ser Asn Thr Ser Lys  
 35 40 45  
 Gln Ser Ser Gln Glu Asn Thr Ile Asn Gln Thr Glu Gln Asn Gln Pro  
 50 55 60  
 Thr Glu Asn Asn Ser Ser Ser Gln Gln Asp Leu Gln Leu Ile Thr Glu  
 65 70 75 80  
 Asn Glu Ala Ile Gln Lys Val Lys Asp Glu Phe Pro Pro Ile Arg Thr  
 85 90 95  
 Gly Asn Asp Tyr Arg Ile Asp Thr Thr Arg Thr Asp Asn Asn Val Tyr  
 100 105 110  
 Ala Ile Lys Phe Thr Ser Gln Asp Ala Glu Gly Tyr Pro Met Lys Ala  
 115 120 125  
 Ala Val Thr Ile Asp Lys Arg Thr Gly Glu Phe Ile Asp Tyr Ile Asp  
 130 135 140  
 Asp Arg Ser Asp Glu Asp Lys Glu Arg His Val Gln His Ala Lys Glu  
 145 150 155 160  
 Ser Thr Leu Tyr Lys Gly Pro Tyr Asp Ala Phe Arg Lys Asp Phe Ser  
 165 170 175  
 His Lys Ile Asn Glu  
 180

<210> 6691  
 <211> 80  
 <212> PRT  
 <213> S.epidermidis

<400> 6691  
 Arg Ser Thr Leu Met Thr Leu Leu Thr Lys Val Leu Asp Thr Leu Thr  
 1 5 10 15  
 Gly Ile Cys Val Ala Leu Leu Phe Thr Lys Tyr Phe Val Asn Tyr Ala  
 20 25 30  
 Asn Asp Met Phe Asp Trp His Leu Arg Trp Tyr Phe Leu Glu Asn Val  
 35 40 45  
 Pro His Leu Ala Leu Ile Leu Phe Ile Leu Val Phe Ile Phe Ala Val  
 50 55 60  
 Pro Ser Glu Met Ile Lys Asp Lys Asn Lys Lys Lys His Asn Asp Ser  
 65 70 75 80

<210> 6692  
 <211> 55  
 <212> PRT  
 <213> S.epidermidis

<400> 6692  
 Ile Leu Thr Leu Tyr Leu Ser Phe Tyr Glu Thr Leu Asn Ile Leu Phe  
 1 5 10 15  
 Ile His Ile Phe Thr Thr Leu Leu Phe Tyr Gln Leu Glu Asn Ile Arg  
 20 25 30  
 Lys Cys Asn Ile Asn His Lys Ala Cys Lys Thr Ser Phe Ala Leu Asp  
 35 40 45  
 His Asp Ala Leu Ser Phe His  
 50 55

<210> 6693  
 <211> 184  
 <212> PRT  
 <213> S.epidermidis

<400> 6693  
 Phe Cys Met Phe Ser Tyr Gln Ile Asn Lys Asn Ile Lys Leu Lys Ile  
 1 5 10 15  
 Leu Glu Glu Arg Glu Ala Glu Gln Leu Phe Lys Leu Val Asp Ser Asn  
 20 25 30  
 Arg Asp Tyr Leu Ala Glu Phe Leu Pro Phe Val Glu His Thr Lys Lys  
 35 40 45  
 Val Glu Asp Ser Lys His Phe Ile His Ser Ala Leu Gln Gln Phe Ile  
 50 55 60  
 Asp Gly Asn Gly Phe His Cys Gly Ile Trp Ser Asn Lys Glu Leu Ile  
 65 70 75 80  
 Gly Val Ile Gly Leu His Tyr Leu Asp Leu Val Asn Lys Thr Thr Ser  
 85 90 95  
 Ile Gly Tyr Tyr Leu Ala Glu Asp Phe Gln Lys Lys Gly Ile Met Thr  
 100 105 110  
 Lys Cys Thr Lys Ala Leu Ile Arg Tyr Val Tyr Glu Val Tyr Asp Ile  
 115 120 125  
 Asn Arg Ile Glu Ile Arg Met Ser Thr Lys Asn Lys Lys Ser Arg Ala  
 130 135 140

6691-6693 S.epidermidis

Ile Pro Ile Arg Leu Gly Phe Thr Gln Glu Gly Ile Leu Arg Ser Asn  
 145 150 155 160  
 Glu Arg Leu Gln Gly Glu Phe Ser Asp Ser Tyr Val Phe Ser Leu Leu  
 165 170 175  
 Arg Glu Glu Cys Thr Tyr Thr Arg  
 180

<210> 6694  
 <211> 108  
 <212> PRT  
 <213> S.epidermidis

<400> 6694  
 Lys Cys Ile Pro Phe Tyr Phe Gln Lys Ser Ser Ser Ser Ile Ile Lys  
 1 5 10 15  
 Ile Ser Ser Thr Gly Ser Pro Lys Ile Leu Ala Ile Phe Ile Ala Val  
 20 25 30  
 Asn Ile Asp Gly Val Lys Ser Leu Arg Ser Ile Lys Asp Thr Val Cys  
 35 40 45  
 Arg Asp Ile Pro Ala Phe Leu Ala Ser Ser Val Trp Leu Tyr Pro Ser  
 50 55 60  
 Arg Ala Arg Asn Ser Leu Ser Leu Leu Arg Lys Leu Tyr His Phe Leu  
 65 70 75 80  
 Thr Tyr Lys Leu Tyr Asn Ile Phe Val Ile Met Thr Ser Ile Leu Val  
 85 90 95  
 Lys Met Thr Lys Ile Ile Asp Phe Leu Gly Ile Val  
 100 105

<210> 6695  
 <211> 65  
 <212> PRT  
 <213> S.epidermidis

<400> 6695  
 Phe Pro Ser Pro Leu Ala Glu Leu Val Asn Lys Tyr Ser Tyr Ser Leu  
 1 5 10 15  
 Ile Pro Asn Lys Leu Ser Ser Thr Ala Leu Phe Gln Leu Arg Lys Tyr  
 20 25 30  
 Lys Asn Asn Pro Leu Thr Ile Ala Val Lys Gly Leu Leu His Tyr Tyr  
 35 40 45  
 Ile Ile Phe Tyr Ser His Ser Ile Val Leu Gly Gly Leu Glu Val Met  
 50 55 60  
 Ser  
 65

<210> 6696  
 <211> 41  
 <212> PRT  
 <213> S.epidermidis

<400> 6696  
 Asn Leu Ser Phe Ile Tyr Leu Leu Glu Val Tyr Ile Leu Gln Thr Ser  
 1 5 10 15  
 Lys Leu Ile Val Thr Thr Ile Ile Ile Ile Leu Leu Ser Phe Phe Ile  
 20 25 30  
 Leu Leu Cys Phe Phe Phe Asn Phe Tyr

35

40

<210> 6697  
 <211> 192  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6697

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Val | Glu | Ser | Leu | Gly | Arg | Lys | Val | Lys | Glu | Asp | Gly | Val | Val | Ile | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu | Lys | Ile | Leu | Lys | Val | Asp | Gly | Phe | Leu | Asn | His | Gln | Ile | Asp | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Leu | Met | Asn | Asp | Val | Gly | Lys | Thr | Phe | Tyr | Glu | Ser | Phe | Lys | Asp |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Ala | Gly | Ile | Thr | Lys | Ile | Leu | Thr | Ile | Glu | Ala | Ser | Gly | Ile | Ala | Pro |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Ala | Ile | Met | Ala | Ser | Phe | His | Phe | Asp | Val | Pro | Cys | Leu | Phe | Ala | Lys |
| 65  |     |     |     |     | 70  |     |     |     | 75  |     |     |     |     |     | 80  |
| Lys | Ala | Lys | Pro | Ser | Thr | Leu | Lys | Asp | Gly | Phe | Tyr | Ser | Thr | Asp | Ile |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| His | Ser | Phe | Thr | Lys | Asn | Lys | Thr | Ser | Thr | Val | Ile | Val | Ser | Glu | Glu |
|     |     |     | 100 |     |     |     | 105 |     |     |     |     |     | 110 |     |     |
| Phe | Leu | Gly | Ala | Asp | Asp | Lys | Val | Leu | Ile | Ile | Asp | Asp | Phe | Leu | Ala |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Asn | Gly | Asp | Ala | Ser | Leu | Gly | Leu | Asn | Asp | Ile | Val | Lys | Gln | Ala | Asn |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Ala | Thr | Thr | Val | Gly | Val | Gly | Ile | Val | Val | Glu | Lys | Ser | Phe | Gln | Asn |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Gly | Arg | Gln | Arg | Leu | Glu | Asp | Ala | Gly | Leu | Tyr | Val | Ser | Ser | Leu | Cys |
|     |     |     | 165 |     |     |     |     | 170 |     |     |     |     |     | 175 |     |
| Lys | Val | Ala | Ser | Leu | Lys | Gly | Asn | Lys | Val | Thr | Leu | Leu | Gly | Glu | Ala |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |

<210> 6698  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6698

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Tyr | Phe | Phe | Thr | Leu | Gln | Gln | Asn | Pro | Ser | Phe | Ile | Gln | Cys | Ser |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu | Gly | Val | Leu | Lys | Asn | Ser | Leu | Gln | Ser | Ala | Ile | Phe | Val | Leu | Asp |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Leu | Leu | Thr | Met | Arg | Asp | Ser |     |     |     |     |     |     |     |     |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     |     |     |     |     |

<210> 6699  
 <211> 40  
 <212> PRT  
 <213> S.epidermidis

&lt;400&gt; 6699

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ile | Lys | Lys | Pro | Val | Asn | Glu | Phe | Met | Lys | Thr | His | Leu | Leu | Ser | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Leu | Ile | Gly | Ile | Met | Ser | Gln | Ala | Leu | Tyr | Pro | Thr | Ile | Ser | Gln | Val |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |

Leu Ile Ile Lys Ile Ser Ile Thr  
35 40

<210> 6700

<211> 366

<212> PRT

<213> S.epidermidis

<400> 6700

Ile Met Ala Leu Thr Ala Gly Ile Val Gly Leu Pro Asn Val Gly Lys  
1 5 10 15  
Ser Thr Leu Phe Asn Ala Ile Thr Lys Ala Gly Ala Leu Ala Asn  
20 25 30  
Tyr Pro Phe Ala Thr Ile Asp Pro Asn Val Gly Ile Val Glu Val Pro  
35 40 45  
Asp Ser Arg Leu Ile Lys Leu Glu Glu Met Val Gln Pro Lys Lys Thr  
50 55 60  
Ile Pro Thr Thr Phe Glu Phe Thr Asp Ile Ala Gly Ile Val Lys Gly  
65 70 75 80  
Ala Ser Lys Gly Glu Gly Leu Gly Asn Lys Phe Leu Ser His Ile Arg  
85 90 95  
Glu Val Asp Ala Ile Cys Gln Val Val Arg Ala Phe Asp Asp Glu Asn  
100 105 110  
Val Thr His Val Ser Gly Arg Val Asn Pro Leu Asp Asp Ile Glu Val  
115 120 125  
Ile Asn Met Glu Leu Val Leu Ala Asp Leu Glu Ser Val Glu Lys Arg  
130 135 140  
Leu Pro Lys Ile Glu Lys Met Ala Arg Gln Lys Asp Lys Thr Ala Glu  
145 150 155 160  
Met Glu Leu Arg Ile Leu Thr Gln Ile Lys Glu Ala Leu Glu Asp Gly  
165 170 175  
Lys Pro Val Arg Ser Ile Asp Phe Asn Glu Asp Asp Gln Lys Trp Val  
180 185 190  
Asn Gln Ala Gln Leu Leu Thr Ser Lys Lys Met Leu Tyr Ile Ala Asn  
195 200 205  
Val Gly Glu Asp Glu Ile Gly Asp Lys Asp Asn Asp Lys Val Lys Ala  
210 215 220  
Ile Arg Glu Tyr Ala Ala Asn Glu Asp Ser Glu Val Ile Val Ile Ser  
225 230 235 240  
Ala Lys Ile Glu Glu Glu Ile Ala Thr Leu Asp Asp Glu Asp Lys Glu  
245 250 255  
Met Phe Leu Glu Asp Leu Asp Ile Glu Glu Pro Gly Leu Asp Arg Leu  
260 265 270  
Ile Arg Thr Thr Tyr Asp Leu Leu Gly Leu Ser Thr Tyr Phe Thr Ala  
275 280 285  
Gly Val Gln Glu Val Arg Ala Trp Thr Phe Lys Gln Gly Met Thr Ala  
290 295 300  
Pro Gln Cys Ala Gly Ile Ile His Thr Asp Phe Glu Arg Gly Phe Ile  
305 310 315 320  
Arg Ala Glu Val Thr Ser Tyr Glu Asp Tyr Val Gln His Gly Gly Glu  
325 330 335  
Asn Gly Ala Lys Glu Ala Gly Arg Gln Arg Leu Glu Gly Lys Asp Tyr  
340 345 350  
Ile Met Gln Asp Gly Asp Ile Val His Phe Arg Phe Asn Val  
355 360 365

CCCTGGGGG



<210> 6701  
 <211> 56  
 <212> PRT  
 <213> S.epidermidis

<400> 6701  
 Arg Ala Ile Thr Thr Val Ile Arg Glu Thr Tyr Asn Asn Glu Ser Ile  
 1 5 10 15  
 Pro Leu Asp Leu Gln Ile Leu Leu Trp His Met Val Glu Glu Lys Asp  
 20 25 30  
 Asn Gln Pro Gln Lys Leu Tyr His Leu Leu Leu Ile Ile Leu Thr Ala  
 35 40 45  
 Ser Leu Ile Ile Phe Phe Val Asn  
 50 55

<210> 6702  
 <211> 53  
 <212> PRT  
 <213> S.epidermidis

<400> 6702  
 Ala Ile Ser Thr Asp Ser Leu Phe Leu Ile Ile Lys Pro Leu Cys Ala  
 1 5 10 15  
 Pro Ile Glu Val Glu Arg Ala Val Thr Lys Gly Ile Ala Asn Pro Lys  
 20 25 30  
 Ala Cys Gly Gln Ala Met Thr Asn Thr Val Thr Arg Arg Ser Ser Ala  
 35 40 45  
 Lys Ser Thr Ser Phe  
 50

<210> 6703  
 <211> 187  
 <212> PRT  
 <213> S.epidermidis

<400> 6703  
 Thr Ala Glu Leu Pro Lys Lys Thr Thr Arg Ile Gly Lys Pro Tyr Tyr  
 1 5 10 15  
 Lys Thr Asp Asn Leu Leu Gln Arg Gln Phe Lys Ala Ser Cys Pro Met  
 20 25 30  
 Glu Val Leu Thr Thr Asp Ile Thr Tyr Leu Pro Phe Gly His Ser Met  
 35 40 45  
 Leu Tyr Leu Ser Ser Ile Met Asp Ile Tyr Asn Gly Glu Ile Val Ala  
 50 55 60  
 Tyr Lys Ile Asp Asp Lys Gln Asp Gln Ser Leu Val Asn Asp Thr Leu  
 65 70 75 80  
 Asn Gln Ile Asp Ile Pro Glu Gly Cys Ile Leu His Ser Asp Gln Gly  
 85 90 95  
 Ser Val Tyr Thr Ser Tyr Ala Tyr Tyr Gln Leu Tyr Glu Glu Lys Gly  
 100 105 110  
 Ile Ile Arg Ser Met Ser Arg Lys Gly Thr Pro Ala Asp Asn Ala Pro  
 115 120 125  
 Ile Glu Ser Phe His Ser Ser Leu Lys Ser Glu Thr Phe Tyr Ile Asn  
 130 135 140  
 Asn Glu Leu Asn Arg Ser Asn His Ile Val Ile Asp Ile Val Glu Lys  
 145 150 155 160

6701 6702 6703



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Leu Pro Ile Ser Ile Pro Glu Val Asn Tyr Gln Asp Val Val Ile Lys
145          150          155          160
Val Leu Asp Glu Leu Glu Asp Lys Ile Glu Ile Asn Lys Lys Ile Ile
          165          170          175
Ala Asn Leu Glu Glu Leu Ser Gln Thr Leu Phe Lys Arg Trp Phe Val
          180          185          190
Asp Phe Glu Phe Pro Asn Glu Glu Gly Asn Pro Tyr Lys Ser Ser Gly
          195          200          205
Gly Glu Met Ile Asp Ser Glu Leu Gly Lys Ile Pro Ser Asn Trp Lys
          210          215          220
Ile Tyr Lys Leu Lys Asp Ile Ala Ser His Lys Lys Glu Thr Phe Asn
225          230          235          240
Pro Lys Lys Ser Glu Glu Val Thr Val Lys His Phe Ser Leu Pro Ala
          245          250          255
Tyr Asp Asn Glu Glu Gln Ala Ile Glu Glu Glu Val Asn Lys Ile Lys
          260          265          270
Ser Asn Lys Trp Ile Ile Asn Asn Asn Cys Val Leu Phe Ser Lys Met
          275          280          285
Asn Pro Asp Thr Lys Arg Ile Trp Leu Pro Val Ile Asp Asn Lys Lys
          290          295          300
Leu Asn Val Ala Ser Ser Glu Phe Val Val Met Glu Ser Pro Asn Asn
305          310          315          320
Lys Ile Asn Ser Phe Ile Tyr Asn Ile Cys Leu Asn Ser Gln Phe Ile
          325          330          335
Asp Tyr Leu Lys Ala Asn Thr Thr Gly Ser Thr Asn Ser Arg Gln Arg
          340          345          350
Val Lys Pro Thr Ile Ala Val Asn Tyr Lys Leu Ala Ile Glu Asp Ser
          355          360          365
Ile Val Lys Lys Tyr Ser Glu Ile Ile Thr Pro Tyr Met Glu Glu Met
          370          375          380
Lys Ile Leu Arg Ser Glu Ile Gly Lys Leu Thr Gln Leu Arg Asp Thr
385          390          395          400
Leu Leu Pro Lys Leu Met Ser Gly Glu Leu Glu Ile Ser Asp Asp Ile
          405          410          415
Glu Val Asn Ser Asp Glu Leu Ser Ile
          420          425

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&lt;210&gt; 6706

&lt;211&gt; 127

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6706

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Ser Ser Asn Thr Arg Thr Gln Thr Lys Ile Glu Ile Thr Ile Tyr Lys
1          5          10          15
Arg Gly Asp Tyr Ser Met Glu Phe Ile Lys Ser Ser Ser Asn Gly Thr
          20          25          30
Glu Glu Glu Gln Leu Glu Phe Tyr Glu Gln Ile Phe Asn Ala Leu Ala
          35          40          45
Asp Lys Ile Arg Leu Lys Ile Leu His Ser Ile Arg Gln Ser Asn Thr
          50          55          60
Lys Ser Leu Cys Val Cys Asp Leu Glu Glu Leu Leu Glu Leu Lys Gln
65          70          75          80
Ser Lys Leu Ser Tyr His Leu Lys Lys Leu Val Asp Ala Asn Ile Leu
          85          90          95
Ile Ala Glu Lys His Gly Thr Trp Asn Tyr Tyr Lys Ile Asn Glu Gln

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|     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |
| Gln | Ile | Gln | Val | Val | Leu | Asn | Glu | Asp | Thr | Cys | Cys | Lys |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |

&lt;210&gt; 6707

&lt;211&gt; 564

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6707

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Leu | Leu | Cys | Thr | Arg | Cys | Ser | Ile | Val | Arg | Cys | Val | Trp | Arg | Arg | Ile |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Ile | Met | Asn | His | Ile | Leu | Gln | Met | Leu | Ser | Lys | Leu | Leu | Ser | Val | Ala |
|     |     |     | 20  |     |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Lys | Glu | Ala | Ile | Asp | Arg | Gln | Gly | Leu | Ile | Ala | Ile | Leu | Thr | Ile | Pro |
|     |     | 35  |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Val | Asn | Asn | Asp | Asp | Glu | Ile | Glu | Glu | Thr | Ala | Gln | Gly | Glu | Thr | Val |
|     | 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |
| Tyr | Asn | Glu | Leu | Ile | Asp | Gln | Leu | Arg | Leu | Asn | Ile | Pro | Lys | Asp | Thr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Asp | Tyr | Arg | Pro | Asn | Ile | Tyr | Ser | Tyr | Phe | Gly | Ile | Lys | Lys | Asn | Pro |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Asn | Asp | Thr | Val | Leu | Met | Glu | Met | Met | Ile | Lys | Val | Phe | His | Ile | Lys |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     | 110 |     |     |
| Arg | Phe | Asn | Ser | Glu | Leu | Phe | Val | Phe | Lys | Ala | Asn | Gly | Trp | Gln | Lys |
|     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |     |
| Ile | Asn | Gly | Asp | Glu | Leu | Gln | Gly | Leu | Ile | Ser | Lys | Met | Ile | Gln | Val |
|     | 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |
| Leu | Leu | Val | Asp | Tyr | Lys | Pro | Ser | Leu | Ser | Thr | Leu | Lys | Asn | Val | Val |
|     |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     | 160 |     |
| Asp | Gly | Leu | Gln | Lys | Ser | Thr | Asp | Val | Glu | Glu | Leu | Val | Glu | Asn | Glu |
|     |     |     |     | 165 |     |     |     |     | 170 |     |     |     |     | 175 |     |
| His | Tyr | Ile | Gly | Cys | Gly | Glu | Asn | Met | Phe | Asp | Leu | Asn | Thr | Phe | Gln |
|     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |
| Val | Val | Lys | Asn | Ser | Ile | Asp | Ile | Phe | Pro | Lys | Thr | Arg | Leu | Asn | Leu |
|     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |
| Ser | Leu | Ser | Thr | Asn | Asp | Val | Ile | Thr | Asp | Lys | Ile | Pro | Pro | Tyr | Phe |
|     | 210 |     |     |     | 215 |     |     |     |     |     | 220 |     |     |     |     |
| Lys | Gln | Tyr | Met | Leu | Gln | Leu | Ala | Asn | Tyr | Asp | Asp | Asp | Leu | Gln | Tyr |
|     | 225 |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |
| Phe | Leu | Phe | Gln | His | Thr | Ala | Val | Leu | Leu | Thr | Ala | Asp | Thr | Lys | Tyr |
|     |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |
| Arg | Arg | Gly | Leu | Ile | Leu | Tyr | Gly | Gly | Ala | Lys | Asn | Gly | Lys | Ser | Val |
|     |     | 260 |     |     |     |     | 265 |     |     |     |     |     | 270 |     |     |
| Tyr | Ile | Glu | Leu | Val | Lys | Ser | Phe | Phe | Tyr | Ser | Lys | Asp | Ile | Val | Ser |
|     | 275 |     |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |
| Lys | Pro | Leu | Asn | Glu | Leu | Glu | Gly | Arg | Phe | Asp | Lys | Glu | Ser | Leu | Ile |
|     | 290 |     |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |
| Asp | Lys | Ser | Leu | Met | Ala | Ser | His | Glu | Ile | Gly | Gln | Ser | Lys | Ile | Gln |
|     | 305 |     |     |     | 310 |     |     |     |     | 315 |     |     |     | 320 |     |
| Glu | Lys | Ile | Val | Asn | Asp | Phe | Lys | Lys | Leu | Leu | Ser | Val | Glu | Ser | Met |
|     |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |
| His | Val | Asp | Arg | Lys | Gly | Lys | Thr | Gln | Val | Glu | Val | Ile | Leu | Asp | Leu |
|     |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |
| Lys | Leu | Ile | Phe | Ser | Thr | Asn | Ala | Ile | Leu | Asn | Phe | Pro | Pro | Glu | His |
|     |     | 355 |     |     |     |     | 360 |     |     |     |     |     | 365 |     |     |

Ala Lys Ala Leu Glu Arg Arg Ile Asn Ile Ile Pro Cys Glu Tyr Tyr  
 370 375 380  
 Val Glu Lys Ala Asp Thr Ser Leu Ile Asp Lys Leu Gln Ser Glu Lys  
 385 390 395 400  
 Lys Glu Ile Phe Leu Tyr Leu Met Tyr Val Tyr Gln Gln Ile Val Lys  
 405 410 415  
 Ala Asp Ile Glu Tyr Leu Glu Asn Ser Arg Val Thr Glu Ile Thr His  
 420 425 430  
 Asp Trp Leu Asn Phe Gly Tyr Glu Phe Val Ser Ser Arg Ser Val Ser  
 435 440 445  
 Ile Ala Asn Gln Lys Ala Cys Ile Asn Leu Leu Arg Lys Leu Ile Glu  
 450 455 460  
 Ile Lys Ser Gly Ser Arg Ile Lys Val Ser Glu Leu Asn Lys Val Ile  
 465 470 475 480  
 Asn Glu Glu Ile Lys Val Ser Ser Gln Val Ile Asn Gln Leu Ile Gln  
 485 490 495  
 Ala Asn Phe Asp Thr Gln Thr Lys Leu Tyr Asn Gly Tyr Asp Tyr Trp  
 500 505 510  
 Ile Asp Leu Gly Trp Lys Glu Ala Asn Lys Lys Glu Ile His Asp Ile  
 515 520 525  
 Ser Glu Lys Asp Asn Ile Ile Ser Leu Asp Lys Asn Glu Asn Ile Thr  
 530 535 540  
 Asp Asp Glu Ala Leu Asp Glu Glu Asn Leu Asp Phe Asp Trp Glu Asp  
 545 550 555 560  
 Cys Asp Asp Glu

<210> 6708  
 <211> 74  
 <212> PRT  
 <213> S.epidermidis

<400> 6708  
 Lys Gly Val Thr Gly Asn Gly Lys Ser Tyr Ile Ala Phe Thr Leu Val  
 1 5 10 15  
 Asn His Ala Ile Asp Asn Arg Tyr Ser Val Leu Phe Tyr Arg Leu Thr  
 20 25 30  
 Asp Leu Leu Ser Lys Leu Gln Gln Ala Asp Tyr Asn Ser Ile Asp Lys  
 35 40 45  
 Leu Leu Lys Val Ile Ser Arg Thr Asp Ile Leu Val Asn Asp Asp Phe  
 50 55 60  
 Leu Leu Pro Tyr Thr Thr Glu Gln Glu Gln  
 65 70

<210> 6709  
 <211> 380  
 <212> PRT  
 <213> S.epidermidis

<400> 6709  
 Ile Tyr Tyr Thr Arg Arg Ile Tyr Met Asn Lys Lys Leu Leu Trp Ser  
 1 5 10 15  
 Ile Ile Gly Ile Val Ile Ile Val Val Leu Ile Ile Ala Ala Phe Ile  
 20 25 30  
 Leu Lys Gln Val Asn Gly Ser Gly Ser Lys Asp Ser Lys Ala Tyr Asp  
 35 40 45

Thr Tyr Thr Val Arg Lys Glu Thr Pro Ile Ser Leu Glu Gly Lys Ala  
 50 55 60  
 Ser Pro Glu Ser Val Lys Thr Tyr Asn Asn Asn Gln Ser Val Gly Asn  
 65 70 75 80  
 Phe Leu Ser Val Ser Val Gln Asp Gly Gln Thr Val Lys Gln Gly Glu  
 85 90 95  
 Arg Ile Ile Asn Tyr Asp Thr Asn Gly Asn Lys Arg Gln Gln Leu Val  
 100 105 110  
 Asn Lys Val Asn Gln Ala Gln Ser Gln Val Asn Asp Asp Tyr Gln Lys  
 115 120 125  
 Val Asn Gln Ser Pro Asn Asn His Gln Leu Gln Val Lys Leu Thr Gln  
 130 135 140  
 Asp Gln Ser Ala Leu Asn Glu Ala Gln Gln Ser Leu Ser Gln Tyr Asp  
 145 150 155 160  
 Arg Gln Leu Asn Asp Ser Met Asn Ala Ser Phe Asp Gly Lys Ile Asn  
 165 170 175  
 Ile Lys Asn Asp Ser Asp Val Gly Glu Gly Gln Pro Ile Leu Gln Leu  
 180 185 190  
 Ile Ser Ser Asn Pro Gln Ile Asn Ala Thr Ile Thr Glu Phe Asp Ile  
 195 200 205  
 Asn Lys Ile Lys Glu Gly Asp Glu Val Asp Val Thr Val Asn Ser Thr  
 210 215 220  
 Gly Lys Lys Gly Lys Gly Lys Ile Leu Lys Ile Asp Glu Leu Pro Thr  
 225 230 235 240  
 Ser Tyr Asp Thr Ser Asp Asp Ser Thr Ala Ser Ser Ala Gln Ala Gly  
 245 250 255  
 Ala Gln Gly Asp Ser Glu Glu Gly Thr Glu Met Thr Thr Ser Asn Pro  
 260 265 270  
 Thr Ile Asn Gln Pro Thr Gly Gly Lys Ser Gly Glu Thr Ser Lys Tyr  
 275 280 285  
 Lys Val Ile Ile Gly Asp Leu Asp Ile Pro Val Arg Ser Gly Phe Ser  
 290 295 300  
 Met Asp Ala Lys Ile Pro Leu Lys Thr Lys Lys Leu Pro Asn Asn Val  
 305 310 315 320  
 Leu Thr Lys Asp Asn Asn Val Phe Val Val Asp Lys Asn Asn Lys Val  
 325 330 335  
 His Lys Arg Glu Ile Lys Ile Glu Arg Asn Asn Gly Glu Ile Ile Val  
 340 345 350  
 Lys Lys Gly Leu Lys Ser Gly Asp Lys Val Leu Lys Ser Pro Lys Gly  
 355 360 365  
 Asn Leu Asn Asp Gly Glu Lys Val Glu Val Ser Ser  
 370 375 380

&lt;210&gt; 6710

&lt;211&gt; 114

&lt;212&gt; PRT

&lt;213&gt; S.epidermidis

&lt;400&gt; 6710

Thr Lys Leu Thr Arg Cys Leu Met Tyr Lys Asp Tyr Asn Met Thr Gln  
 1 5 10 15  
 Leu Thr Leu Pro Met Glu Thr Ser Val Leu Ile Pro Thr Asn Asp Ile  
 20 25 30  
 Ser Arg His Val Asn Asp Ile Val Glu Thr Ile Pro Glu Thr Glu Phe  
 35 40 45  
 Asp Glu Phe Arg His His Arg Gly Ala Thr Ser Tyr His Pro Lys Met

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<210> 6711
<211> 90
<212> PRT
<213> S.epidermidis
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<210> 6712
<211> 63
<212> PRT
<213> S.epidermidis
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<210> 6713
<211> 43
<212> PRT
<213> S.epidermidis
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<400> 6713
Pro Phe Gln Thr Arg Arg Cys Thr Asn Arg Asn Tyr Lys Gly Val Ile
1                    5                      10                      15
Tyr Gln Asp Ser Val Pro Ala Phe Tyr Phe Lys Asn Ile Tyr Leu Cys
20                    25                      30
Leu Ile Ile Phe His Ile Ala Ile Lys Leu Lys
35                    40

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<210> 6714  
 <211> 109  
 <212> PRT  
 <213> S.epidermidis

<400> 6714  
 Met Ala Arg Thr Tyr Asn Val Ile Lys Tyr Val Ile Lys Lys Asn Lys  
 1 5 10 15  
 Asp Asp Leu Lys Ile His Gly Leu Arg Leu Tyr Glu Phe Asn Ile Lys  
 20 25 30  
 Asp Glu Lys Ala Ile Asn Ile Ser Gln Pro Ile Phe Val Asn Arg Ala  
 35 40 45  
 Thr Leu Ile Glu Lys Ile Gln Asn Asp Glu Ala Phe Thr His Ala Phe  
 50 55 60  
 Arg Val Asn His Asn Thr Tyr Tyr Ala Gly Gln Leu Ile Ser Leu Ser  
 65 70 75 80  
 Leu Asn Lys Asn Gly Tyr Ile Asn Asn Asn Phe Glu Ala Ser Arg Asp  
 85 90 95  
 Ile Ile Arg Asn Val Glu Val Ser Ile Leu Asp Tyr Glu  
 100 105

<210> 6715  
 <211> 99  
 <212> PRT  
 <213> S.epidermidis

<400> 6715  
 Thr Met Arg Thr Tyr Glu Ile Met Tyr Ile Val Arg Pro Asn Ile Glu  
 1 5 10 15  
 Glu Asp Ala Lys Lys Ala Leu Val Glu Arg Phe Asn Gly Ile Leu Ala  
 20 25 30  
 Ser Glu Gly Ser Glu Val Leu Glu Glu Lys Asp Trp Gly Lys Arg Arg  
 35 40 45  
 Leu Ala Tyr Glu Ile Asn Asp Phe Lys Glu Gly Phe Tyr Asn Ile Val  
 50 55 60  
 Arg Ile Lys Thr Asp Asn Asn Lys Ser Thr Asp Glu Phe Gln Arg Leu  
 65 70 75 80  
 Ala Lys Ile Asn Asp Asp Ile Ile Arg Tyr Ile Val Ile Arg Glu Asp  
 85 90 95  
 Gln Asp Lys

<210> 6716  
 <211> 71  
 <212> PRT  
 <213> S.epidermidis

<400> 6716  
 Ile Ile Met Thr Ala Asn Val Val Val Ile Thr Met Thr Phe Glu Phe  
 1 5 10 15  
 Ser Glu Pro Asn Leu Asn Val Arg Gly Asn Ile Met Glu Lys Val Pro  
 20 25 30  
 Ala Pro Pro Met Ala Thr His Ser Glu Met Asn Thr Ile Leu Lys Leu  
 35 40 45  
 Cys Val Ile Arg Pro Thr Leu Gly Thr Pro Ala Ser Ile Pro Thr Asn



50                      55                      60  
 Ala His Lys Arg Lys Ile Val  
 65                      70

<210> 6717  
 <211> 147  
 <212> PRT  
 <213> S.epidermidis

<400> 6717  
 Pro Cys Lys Thr Thr Phe Leu Lys Gly Ala Ile Ile Met Ala Lys Ile  
 1                      5                      10                      15  
 Thr Val Val Asn Asn Gln Asp Glu Leu Tyr Lys Val Ile Asn Gln Ile  
                     20                      25                      30  
 Lys Ser Glu Gly Tyr Leu Glu Thr Glu Leu Ala Val Ile Ser Lys Ser  
                     35                      40                      45  
 Lys Leu His Leu Asp Asp Leu His Asn Ser Gln Ile Ser Leu Met Ala  
                     50                      55                      60  
 Thr Ser Gly Ser Phe Ser Asp Arg Met Ser Arg Leu Leu Thr Gly Glu  
 65                      70                      75                      80  
 Asp Gly Glu Glu Thr Val Leu Ser Arg Tyr Asp Leu Thr Asp Asn Glu  
                     85                      90                      95  
 Leu Glu Gly Tyr Lys Gln Asp Ile Leu Asn Asp Lys Met Leu Val Val  
                     100                      105                      110  
 Ala Asn Ser Asp Arg Ser Ser His Asp Glu Val Glu Asp Asn Asn Ala  
                     115                      120                      125  
 Ala Tyr Lys Glu Val Asp Ile Thr His Tyr Ala Ala Glu Ser Glu Gly  
 130                      135                      140  
 Pro Lys Ala  
 145

<210> 6718  
 <211> 464  
 <212> PRT  
 <213> S.epidermidis

<400> 6718  
 Gly Gly Glu Thr Leu Met Asp Phe Asp Thr Ile Thr Ser Ile Ser Thr  
 1                      5                      10                      15  
 Pro Met Gly Glu Gly Ala Ile Gly Ile Val Arg Leu Ser Gly Pro Gln  
                     20                      25                      30  
 Ala Ile Glu Ile Gly Asp Ile Leu Tyr Lys Gly Lys Lys Lys Leu Ser  
                     35                      40                      45  
 Glu Val Glu Thr His Thr Ile Asn Tyr Gly His Ile Ile Asp Pro Glu  
                     50                      55                      60  
 Thr Asn Glu Thr Val Glu Glu Val Met Val Ser Val Leu Arg Ala Pro  
 65                      70                      75                      80  
 Lys Thr Phe Thr Arg Glu Asp Ile Ile Glu Ile Asn Cys His Gly Gly  
                     85                      90                      95  
 Ile Leu Thr Ile Asn Arg Ile Leu Glu Leu Thr Met Thr Tyr Gly Ala  
                     100                      105                      110  
 Arg Met Ala Glu Pro Gly Glu Tyr Thr Lys Arg Ala Phe Leu Asn Gly  
                     115                      120                      125  
 Arg Ile Asp Leu Ser Gln Ala Glu Ala Val Met Asp Phe Ile Arg Ser  
 130                      135                      140  
 Lys Thr Asp Arg Ala Ser Lys Val Ala Met Asn Gln Ile Glu Gly Arg

